Page 1 of 2 **IT-Solutions Shop** 

ORDER FOR	SUPPLIES	S AND SE	RVICES	IMPORTANT: Se GSAR 553.370-3 distribution	e instructions in 00-1 for		PAGE 1 OF 1 PAGE(S)	
1. DATE OF ORDER 09/17/2012		2. ORDER GST0812B		3. CONTRACT N GS08T12BPA000		4. ACT NUN A2466746I	MBER	
FOR	5. A	CCOUNT	ING CLASSIF	TICATION	6	. FINANCE DIVISION		
GOVERNMENT USE ONLY	FUND 299X	ORG CODE A08VE110	B/A CODE F6	O/C CODE 25	AC	ss	VENDOR NAME	
	FUNC CODE C01	C/E CODE H08	PROJ./PROS. NO.	CC-A	MDL	FI	G/L DEBT	
	W/ITEM	СС-В	PRT./CRFT		AI	LC	DISCOUNT	
7. TO: CONTRACTOR Martin A Payne	•	ress and zip	code)		8. TYPE OF ORDER REFEREN B. DELIVERY		REFERENCE YOUR	
SOFTEC SOLUTIONS I 384 INVERNESS PKWY ENGLEWOOD, CO 801 United States	/ STE 211				sides of the order	Please furnish the following on the terms specified on both sides of the order and the attached sheets, if any, including delivery as indicated.		
(303) 483-2114					This delivery order is subject to instructions contained on this side only of this form and is issued subject to the terr and conditions of the above numbered contract.			
					C. MODIFICATION NO. 000 TYPE OF MODIFICATION:  AUTHORIT ISSUING		AUTHORITY FOR ISSUING	
9A. EMPLOYER'S IDENTIFICATION 9B. CHECK, IF WITHHOLD 20° 841349590					Except as provided herein, all terms and conditions of the original order, as heretofore modified, remain unchanged.			
10A. CLASSIFICATION C. Small Disadvantaged					10B. TYPE OF BUSINESS ORGANIZATION C. Corporation			
11. ISSUING OFFICE (Address, zip code, and telephone no.) GSA Region 8 Heidi N Sawyer PO Box 25530 Denver, CO 80225 United States (303) 236-5032			E 211	13. SHIP TO(Consignee address, zip code and telephone no.) Andrew J Berry 2354 Fairchild Drive Suite 4K25 USAFA, CO 80840 United States (719) 235-7724				
14. PLACE OF INSPECTION AND ACCEPTANCE Andrew J Berry 2354 Fairchild Drive USAFA, CO 80840 United States			15. REQUISITION Suzanne M. Schur GSA Region 8, FT P.O. Box 25526 Denver, CO 80225 United States (303) 236-7565	S 8T				
16. F.O.B. POINT Destination		17. GOVEF NO.	OVERNMENT B/L  18. DELIVERY F.O.B. POINT ON OR BEFORE 09/16/2013  19. PAYMENT/DISCOUNT TERMS NET 30 DAYS / 0.00 % 0 DAYS / 0.00 % 0 DAYS / 0.00 M O DAYS					

#### 20. SCHEDULE

SofTec Solutions, Inc. is hereby awarded call order number GST0812BP0064 in accordance with the terms and conditions of the BPA #GS08T12BPA0005.

Work shall be performed in accordance with the performance work statement dated August 27, 2012, for the Institute for Information Technology Applications (IITA) Wedge Software Maintenance supporting USAFA in Colorado Springs, Colorado.

SofTec Solutions, Inc.'s technical and price quote as submitted on August 30, 2012 and price quote revised on September 6, 2012 are accepted and attached to this award document and incorporated by reference in their entirety.

This call order has a base period and three option periods as indicated below.

Base Period - September 17, 2012 through September 16, 2013 in the amount of \$1,425,752.00. Option Year 1 - September 17, 2013 through September 16, 2014 in the amount of \$1,370,423.00 Option Year 2 - September 17, 2014 through September 16, 2015 in the amount of \$1,370,423.00

Option Year 3 - September 17, 2015 through September 16, 2016 in the amount of \$1,370,423.00

Total call order value: \$5,537,021.00

The initial award amount for the base period is a firm fixed price of \$1,425,752.00.

This call order is being incrementally funded as allowed by DFARS 252.232-7007. The initial funding amount is \$610,058.68.

CLIN 0001 is incrementally funded in the amount of \$490,856.68

CLIN 0002 is fully funded in the amount of \$63,873.00

CLIN 0003 is funded at \$0.00

CLIN 0004 is funded at \$0.00

CLIN 0005 is funded at \$0.00

IT-Solutions Shop Page 2 of 2

CLIN 0006 is fully funded in the amount of \$55,329.00								
ITEM NO.	SUPPLIES (	OR SERVICES	QUANTITY ORDERED	UNIT	UNIT	PRICE	AMOUNT	
(A)		(B)				(E)	(F)	
001	USAFA IITA Software Enginee	neering & Management 2012 1 lot			\$	610,058.68	\$610,058.68	
21. RECEIVING Air Force Academ	elephone no.)			TOTAL From 00-A(s)				
22. SHIPPING P Specified in QUO		23. GROSS SHIP WT.			GRAND TOTAL	\$610,05	8.68	
Finance Operation (BCEB)	CE TO: (Include zip code) ns and Disbursement Branch	25A. FOR INQUIRIES REGARDING PAYMENT CONTACT: GSA Finance Customer Support			25B. TELEPHONE NO. 816-926-7287			
299X PO Box 219434 Kansas City, MO 641219434 United States		26A. NAME OF CONTRACTING/ORDERING OFFICER <i>(Type)</i> Heidi N Sawyer			26B. TELEPHONE NO. (303) 236-5032			
		26C. SIGNATURE Heidi N Sawyer 09/17/2012						
GENERAL SERV	/ICES ADMINISTRATION	1. PAYING OFFICE			(	GSA FORM	<b>300</b> (REV. 2-93)	



#### **REQUEST FOR QUOTATIONS**

Institute for Information Technology Applications
Blanket Purchase Agreement

#### **CALL ORDER**

GSA Project Number: ID08120040 Call Order Number: GST0812BP0064

Wedge Software Maintenance

**LOCATED AT** 

United States Air Force Academy Colorado Springs, Colorado

Quotations Requested by
U.S. General Services Administration
Federal Acquisition Service, Office of Assisted Acquisitions
Rocky Mountain Region

Issue Date: August 16, 2012 RFQ Close Date: August 30, 2012 Award Date: September 17, 2012

#### 1.0 CALL ORDER SPECIFICS

Call order (hereafter referred to as Order) is submitted for quotation in accordance with multiple award GSA Blanket Purchase Agreement (BPA) for Institute of Information Technology Applications (IITA).

Order is submitted as firm-fixed price professional services. This is a new requirement and therefore does not have a basis for the level of effort or historical data to provide an accurate estimate of labor.

The performance period to complete tasks outlined in the Performance Work Statement (PWS) is one year with three one year options.

#### 1.1 Order Pricing

Pricing shall be submitted on Table 1.0 Price and Cost Schedule. Table is included as a MS Excel file and may be completed electronically. The contractor shall complete unit price and amount for all line items listed in table.

ITEM No.	DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT
0001	Software Maintenance	12	МО	\$	\$755,939.00
0002	Documentation Support	12	МО	\$	\$63,873.00
0003	Supplementary Capability			NTE	\$390,000
0004	Software Quality Assurance Support	1880	HR	NTE	\$ 150,611.00
0005	Travel			NTE	\$10,000
0006	Other Direct Costs				\$55,329.00
OPTION 1001	Software Maintenance	12	MO		\$755,939.00
OPTION 1002	Documentation Support	12	MO		\$63,873.00
OPTION 1003	Supplementary Capability			NTE	\$390,000
OPTION 1004	Software Quality Assurance Support	1880	HR	NTE	\$ 150,611.00
OPTION 1005	Travel			NTE	\$10,000

OPTION 1006	Other Direct Costs				\$0
OPTION 2001	Software Maintenance	12	MO		\$755,939.00
OPTION 2002	Documentation Support	12	MO		\$63,873.00
OPTION 2003	Supplementary Capability			NTE	\$390,000
OPTION 2004	Software Quality Assurance Support	1880	HR	NTE	\$ 150,611.00
OPTION 2005	Travel			NTE	\$10,000
OPTION 2006	Other Direct Costs				\$0
OPTION 3001	Software Maintenance	12	МО		\$755,939.00
OPTION 3002	Documentation Support	12	MO		\$63,873.00
OPTION 3003	Supplementary Capability			NTE	\$390,000
OPTION 3004	Software Quality Assurance Support	1880	HR	NTE	\$ 150,611.00
OPTION 3005	Travel			NTE	\$10,000
OPTION 3006	Other Direct Costs				\$0

#### 1.2 Contracting Office

This task order is issued and administered through GSA Federal Acquisition Services (FAS) Region 8.

Award activities will be conducted through:

#### **Contracting Officer**

Heidi Sawyer

Phone Number: 303.236.5032

Electronic Mail: <a href="mailto:heidi.sawyer@gsa.gov">heidi.sawyer@gsa.gov</a>

Administration activities will be conducted through:

**Contract Specialist** 

Kortni Nevins

Phone Number: 303.236.1927

Electronic Mail: kortni.nevins@gsa.gov

#### 1.4 Invoice Submission

Invoices shall be submitted in accordance with BPA Contract GS08T12BPA0005, Section 6.0 Invoice Submission and Requirements. It is our recommendation that the first invoice be submitted to the Contracting Officer and the Contract Specialist via email for review prior to being input into the system.

Contract Number: GS08T12BPA0005 Call Order Number: GST0812BP0064 ITSS Project Number: ID08120040

Project Title: WEdge Software Maintenance

ACT Number: TBD upon award

#### 2.0 ADDITIONAL TERMS AND CONDITIONS

FAR 52.217-8 Option to Extend Services (NOV 1999)

30 days

FAR 52.219-9 Option to Extend Term of the Contract (MAR 2000)

30 days; 60 days: five years

FAR 52.245-1 Government Property – Alternate I (AUG 2010)

FAR 52.245-2 Government Property Installation Operation Services

Key Personnel (January 2006)

The key personnel specified in this contract are considered to be essential to work performance. At least 30 days prior to diverting any of the specified individuals to other programs or contracts (or as soon as possible, if an individual must be replaced, for example, as a result of leaving the employ of the Contractor), the Contractor shall notify the Contracting Officer and shall submit comprehensive justification for the diversion or replacement request (including proposed substitutions for key personnel) to permit evaluation by the Government of the impact on performance under this contract. The Contractor shall not divert or otherwise replace any key personnel without the written consent of the Contracting Officer. The Government may modify the contract to add or delete key personnel at the request of the contractor or Government.

252.232-7007 Limitation of Government's Obligation

As prescribed in 232.705-70, use the following clause:

#### LIMITATION OF GOVERNMENT'S OBLIGATION (MAY 2006)

- (a) Contract line item(s) \*\_through \*\_are incrementally funded. For these item(s), the sum of \$(contract total) of the total price is presently available for payment and allotted to this contract. An allotment schedule is set forth in paragraph (j) of this clause.
- (b) For item(s) identified in paragraph (a) of this clause, the Contractor agrees to perform up to the point at which the total amount payable by the Government, including reimbursement in the event of termination of those item(s) for the Government's convenience, approximates the total amount currently allotted to the contract. The Contractor is not authorized to continue work on those item(s) beyond that point. The Government will not be obligated in any event to reimburse the Contractor in excess of the amount allotted to the contract for those item(s) regardless of anything to the contrary in the clause entitled "Termination for Convenience of the Government." As used in this clause, the total amount payable by the Government in the event of termination of applicable contract line item(s) for convenience includes costs, profit, and estimated termination settlement costs for those item(s).
- (c) Notwithstanding the dates specified in the allotment schedule in paragraph (j) of this clause, the Contractor will notify the Contracting Officer in writing at least ninety days prior to the date when, in the Contractor's best judgment, the work will reach the point at which the total amount payable by the Government. including any cost for termination for convenience, will approximate 85 percent of the total amount then allotted to the contract for performance of the applicable item(s). The notification will state (1) the estimated date when that point will be reached and (2) an estimate of additional funding, if any, needed to continue performance of applicable line items up to the next scheduled date for allotment of funds identified in paragraph (j) of this clause, or to a mutually agreed upon substitute date. The notification will also advise the Contracting Officer of the estimated amount of additional funds that will be required for the timely performance of the item(s) funded pursuant to this clause, for a subsequent period as may be specified in the allotment schedule in paragraph (j) of this clause or otherwise agreed to by the parties. If after such notification additional funds are not allotted by the date identified in the Contractor's notification, or by an agreed substitute date, the Contracting Officer will terminate any item(s) for which additional funds have not been allotted, pursuant to the clause of this contract entitled "Termination for Convenience of the Government."
- (d) When additional funds are allotted for continued performance of the contract line item(s) identified in paragraph (a) of this clause, the parties will agree as to the period of contract performance which will be covered by the funds. The provisions of paragraphs (b) through (d) of this clause will apply in like manner to the additional allotted funds and agreed substitute date, and the contract will be modified accordingly.
- (e) If, solely by reason of failure of the Government to allot additional funds, by the dates indicated below, in amounts sufficient for timely performance of the contract line item(s) identified in paragraph (a) of this clause, the Contractor

incurs additional costs or is delayed in the performance of the work under this contract and if additional funds are allotted, an equitable adjustment will be made in the price or prices (including appropriate target, billing, and ceiling prices where applicable) of the item(s), or in the time of delivery, or both. Failure to agree to any such equitable adjustment hereunder will be a dispute concerning a question of fact within the meaning of the clause entitled "Disputes."

- (f) The Government may at any time prior to termination allot additional funds for the performance of the contract line item(s) identified in paragraph (a) of this clause.
- (g) The termination provisions of this clause do not limit the rights of the Government under the clause entitled "Default." The provisions of this clause are limited to the work and allotment of funds for the contract line item(s) set forth in paragraph (a) of this clause. This clause no longer applies once the contract is fully funded except with regard to the rights or obligations of the parties concerning equitable adjustments negotiated under paragraphs (d) and (e) of this clause.
- (h) Nothing in this clause affects the right of the Government to terminate this contract pursuant to the clause of this contract entitled "Termination for Convenience of the Government."
- (i) Nothing in this clause shall be construed as authorization of voluntary services whose acceptance is otherwise prohibited under 31 U.S.C. 1342.
- (j) The parties contemplate that the Government will allot funds to this contract in accordance with the following schedule:

On execution of contract \$ 610,058.68 December 31, 2012 \$ 815,693.32

(End of clause)

Travel – Must be approved in advance by the Contracting Officer's Representative and the Contracting Officer. Travel must be in accordance with Federal Travel Regulations.

#### 3.0 ATTACHMENTS, APPENDICES, AND EXHIBITS

- 3.1 Attachment 1 Performance Work Statement
- 3.2 Attachment 2 Quality Assurance Surveillance Plan

### **United Air Force Academy (USAFA)**





## Blanket Purchase Agreement CALL ORDER #4

## WEdge Software Maintenance Performance Work Statement (PWS)

26 July 2012 Updated 27 August 2012

#### 1 DESCRIPTION OF SERVICES

#### 1.1 Description

This PWS is issued for support of software engineering, product lifecycle sustainment, Team Foundation Server (TFS) configuration management, and engineering consultation for the Headquarters, USAF Academy, Department of Education, Institute for Information Technology Applications (HQ USAFA/DFEI), Warfighter's Edge Program Management Office, henceforth referred to as the WEdge PMO.

#### 1.2 Background

No changes to the BPA

#### 1.3 Objective

The objective is to provide a technically oriented software maintenance group working in a collaborative atmosphere as part of the WEdge PMO providing 1) oversight on the configuration management of Team Foundation Server. 2) Software engineering to modify, perfect and adapt WEdge products as necessary to maintain product viability. 3) Documentation of processes and required deliverables and 4) professional consultation on design and validation of algorithms, architecture and extensibility frameworks.

#### 1.4 Scope

The scope of this effort is collaborative work with the WEdge PMO group to enhance the capabilities of the WEdge program. Create and validate configuration management of Team Foundation Server as well as validation of coding standards and practices. Provide maintenance on WEdge software products listed in 1.5.3 and technical consultation. Maintenance of software products is defined as not changing more than 50% of the baseline code and adhering to minor modification practices IAW software versioning. For example, work on version 2.0 to 2.1 or 3.3 to 3.4 is authorized under this PWS. Work toward a major version update 2.1 to 3.0 for example would <u>not</u> be authorized and will be executed under a separate call order.

#### 1.4.1 Period of Performance

The period of performance for this call order is from the date of award through twelve months (12) plus three (3) one year options.

#### 1.5 Service Provider Responsibilities

The service provider shall provide a computer and screen for use on the WEdge network for development and management purposes. The government will not provide personal computers. Cost for these may be included in ODC in a bid, but will become property of the government.

#### 1.5.1 Performance Category 1: Geospatial Services

None

### **1.5.2 Performance Category 2: Software Development and Research**None

## **1.5.3** Performance Category 3: Software Maintenance and Modification Source code for all tasks will be provided in Team Foundation Server as government furnished equipment.

Software maintenance modifications to current code will be limited to the following WEdge products: WEdge Briefing Software (Version 1.x), WEdge Tiered architecture (WEdge Master (version 1.x) and WEdge Repository (version 1.x)), WEdge Extensibility Framework (WEF) (Version 1.x), WEdge Shuttle (Version 1.x and Version 2.x), Mission Planning Route Translator (Version 2.x), Digital Binder(Version 1.x), WEdge website (version 1.x), Point Analysis Tool (Version 1.x), WEdge Excel Card (Version 1.x) and a few smaller programs (henceforth known as WEdge CO4 Products).

<u>CLIN 0001</u> consists of 1.5.3.1, 1.5.3.2 and 1.5.3.3 with appropriate deliverables from section 1.6.

#### 1.5.3.1 Software Maintenance Tasks

The government will provide an updated hierarchical prioritized list of software development and related item tasks known as the "product backlog". The service provider will work items from the backlog by taking items off the backlog from the top of the list using the agile methodology.

The government anticipates the product backlog to be worked at average rate of approximately 100 dedicated development hours per week. A development hour is defined as any full hour devoted to actively writing code in Visual Studio, writing unit tests in Visual Studio or debugging a problem using Visual Studio. All other activities are NOT considered a development hour – for example: SCRUM meetings, design, analysis, documentation, testing or administrating TFS.

The backlog items will consist of the following work at a minimum.

#### 1.5.3.1.1 WEdge Extensibility Framework (WEF)

The WEdge Extensibility Framework (WEF) is a cornerstone of all WEdge products that have extensibility. The WEF has extensible capabilities beyond those of the Managed Extensible Framework (MEF) from Microsoft. Serialization, loading and unloading dynamically as well as extensible components working with knowledge of each other are examples of the capabilities of the software. A software development kit (SDK) will maintain a working integration with Microsoft Visual Studio as a VS installed template complete with sample code and examples.

#### 1.5.3.1.2 Mission Planning Route Translator (MPRT)

The Mission Planning Route Translator is based upon the Managed Extensibility Framework (MEF), WEdge Extensibility Framework (WEF) and the Common Language Mission Planning (CLMP) translation matrix. A binary object is read

with an importer that translates data into the CLMP model, then an exporter for a new binary format reads the CLMP model and produces the required object. This is a complex model.

#### 1.5.3.1.3 WEdge Shuttle

The Shuttle is a client application using a windows service and a tier 2 (WEdge Master) SQL connection to populate and coordinate data in a Shuttle Bucket (zipped file). Handles collisions and integrates with FalconView to display appropriate files. Integrated with the Windows file system to work intuitively. The Shuttle supports an API interface at the Tier 2 level.

#### 1.5.3.1.4 WEdge Briefing Software (WEBS)

To maintain the WEdge Briefing Software, an understanding and manipulation of the Microsoft Office PowerPoint object model is necessary. The WEBS product implements the Tiered architecture similar to the Shuttle but behaves differently. Modification of the WEdge Instrument Panel (settings), the encrypted WEdge Access Control List (WACL), WEdge Sync (synchronization capabilities with the SQL server) and MSMQ messages to the Tier 2.

**1.5.3.1.5** Tier Architecture - WEdge Master (Tier 2) and WEdge Repository (Tier 1) Maintenance of the Tier architecture requires understanding SQL languages and database structures, Windows Communication Foundation, Microsoft Message Queue, web services and windows services.

#### 1.5.3.2 Process Validation

Part of **CLIN 0001**: Provide maintenance of and recommendations to the configuration management plan, agile development process and coding standards. Assist in reviews and compliance with configuration management and coding standards.

#### 1.5.3.3 Consultation

Part of **CLIN 0001**: Provide software architecture and software design consultation.

#### 1.5.3.4 CLIN 0002: Documentation Support

Provide technical documentation support for delivering quality control on all documentation IAW all deliverables required by this PWS. Contractor should not assume this is a full time requirement as documentation compliance with this PWS does not require an FTE level of effort.

#### 1.5.3.5 CLIN 0003: - Supplementary capability

This CLIN will be executed NTE - 390,000 per year.

Provide accommodation of unknown supplementary minor version modifications as approved by the WEdge director. These items will be listed and quoted by the contractor before receiving notification to proceed from the Contracting Officer.

#### 1.5.3.6 CLIN 0004: - Software Quality Assurance Support

Priced separately and not to exceed 1880 hours per year. Provide software quality support for the WEdge PMO delivering separate quality control validation and

testing on all products IAW section 1.6.3. This includes software testing, requirements traceability and quality control of software.

#### 1.5.3.7 Key Personnel

Provide resumes showing relative work experience of personnel that will meet the following needs.

#### 1.5.3.7.1 WEdge Extensibility Framework Capabilities

Demonstrate knowledge of Extensibility Framework designs and implementation of serialization of components. Experience in MEF or WEF use and manipulation is necessary. Demonstrate programming skills to write and/or modify a software development kit (SDK) for the WEF integrated with Microsoft Visual Studio as a visual studio project template complete with sample code. Minimum experience: 24 months experience over the past 3 years direct experience with extensibility frameworks in a production environment.

#### 1.5.3.7.2 Team Foundation Server Configuration

Demonstrate knowledge or experience in configuration of Team Foundation Server to include check-in and check-out rules, daily builds, HP Fortify integration of daily builds, running unit tests, incorporating code metrics and providing reports. Comply with standard configuration processes and adhere to the processes.

## **1.5.4 Performance Category 4: Information Technology Support** None.

#### 1.5.5 All Software Tasks

The service provider shall agree with the government on identification of the following events as they pertain to the product backlog item list: Feature Complete (all required features are included in code and minimally functional), Code Complete (no further code writing is required) and Acceptance (capabilities demonstration and turn over to the government). These events must occur at least once every 100 calendar days from award.

#### 1.5.5.1 Agile Programming Methodology

Identify the code iteration cycle length.

#### 1.5.5.2 Installer Code Writing

No changes from the BPA

#### 1.5.5.3 Software Testing

In addition to the BPA: Software testing will be in conjunction with other individuals on the WEdge PMO. Software developers may at times be required to test software that may not be limited to just functional testing. Other testing support required may include penetration, fuzz, security and regression testing. Tests other than functional testing will be included in the product backlog list.

Unit testing is required around all code written in this PWS showing at least 80% code coverage.

#### 1.5.5.4 Software Security, Certification and Accreditation

No changes from the BPA.

#### 1.5.5.4.1 DoD Information Assurance policies

No changes from the BPA

#### 1.5.5.4.2 Software Reviews and Scans

#### 1.5.5.4.2.1 Code reviews

No changes from the BPA.

#### 1.5.5.4.2.2 Fortify Scans

In addition to the BPA: HP Fortify will validate Critical, High, Medium and Low results as well as Category 1, Category 2 and Category 3 scans. When scanning using Category results, zero unmitigated Category 1 and Category 2 findings will be accepted.

#### 1.5.5.4.2.3 Software Vulnerability

No changes from the BPA

#### 1.5.5.4.2.4 Standard Technical Implementation Guides (STIG) reviews

No changes from the BPA. When discussed in the STIGs, the roles of designer, test manager, and release manager are to be performed by the service provider.

#### 1.5.5.5 Software Development Qualifications

#### 1.5.5.5.1 Certified Ethical Hacker or equivalent

No changes from the BPA.

#### 1.5.5.6 Configuration Management

The WEdge PMO Configuration Management plan is provided on the government SharePoint site for this living document.

#### 1.5.6 All Tasks

#### 1.5.6.1 Interaction with IITA

Provide update reports as necessary and presence at the weekly WEdge PMO status meeting.

#### 1.5.6.2 Customer Interaction & Operational Support

Customer interaction may be required under this PWS but is not expected. If encountered all customer interaction will be documented and treated with the utmost respect.

#### 1.5.6.3 Project Management

The primary IITA Program Manager for this PWS is the IITA government WEdge Director.

#### 1.5.6.3.1 Program Management Plan

No changes from the BPA.

#### 1.5.6.3.2 Metrics

Metrics should be automated with TFS to the maximum extent possible.

#### 1.5.6.3.3 Integrated Digital Environment (IDE)

The IDE for this PWS will be provided by the government in a SharePoint site. All documentation will be uploaded to the provided site and reference material will be accessible.

#### 1.5.6.3.4 Meetings

No changes to the BPA.

## 1.5.6.3.5 Project Management Reviews (PMR), Status and Technical Design Meetings

PMRs will be held once monthly, identified below. Status meetings will be held weekly unless a PMR is accomplished. Technical design meetings will be as necessary.

#### 1.5.6.4 Restrictions on development of proprietary material

Store all documentation, drawings and information pertaining to the call order tasks in the IDE.

#### 1.5.6.5 Data Accession List

No changes to the BPA.

#### 1.5.6.6 Software Sustaining Support

No changes to the BPA.

#### 1.5.6.7 Task Information

No changes to the BPA.

#### 1.5.6.8 Security Requirements

A secret security clearance is required for each individual working on this PWS.

#### 1.5.6.9 Place of performance

No changes to the BPA.

#### 1.5.6.10 Travel

Travel is authorized up to \$10,000 per year.

#### 1.5.6.11 Service provider Purchases

No changes to the BPA.

#### 1.6 Deliverables and Acceptance Criteria

Days are representative of work days, not calendar days unless otherwise dictated. All documentation should be compatible with the Windows 7 operating system and editable by Microsoft Products unless specifically required otherwise.

Provide a final CD/DVD with all final documentation, code, executable files and data as product updates are completed.

All deliverables are required as part of the agile software development cycle and should be congruent with service provider practices.

#### 1.6.1 Deliverables for this PWS

#### D-1: Functional Software Test Plan

Due Date: At each PMR as a review, continually updated from the accepted backlog work or defined optional requirements. Final results at code complete.

Format: Electronic Microsoft product preferred - vendor choice, but must be editable. Include steps for each test so they are repeatable and provide traceability so each discrepancy is fully tested.

Standard: Each backlog requirement is covered by at least one functional test. Performance Criteria: 100% of requirements/backlog items are identified and accurately reported for traceability.

Frequency of Assessment: Monthly

Method of surveillance: Periodic inspection via results provided at the monthly PMR.

Purpose: This will be used to pass on to 3<sup>rd</sup> party testing agencies and provide a way to reproduce a complete regression test and is required by C&A.

#### D-2: Code Review Results.

Due Date: By 5:00 PM on the last day of a code iteration cycle, final results at code completion.

Format: Editable Microsoft Word 2010 electronic format showing the results of peer code reviews describing the section of code reviewed and compliance with the WEdge coding standards.

Standard: Code reviews are conducted to review written code during an iterative development cycle. Conducted in such a manner that code is reviewed for compliance with WEdge coding standards with an emphasis on logic design and possible coding defects.

Performance Criteria: Code reviews are documented and completed timely 80% of the time.

Frequency of Assessment: Monthly

Method of surveillance: Periodic inspection via results provided at end of a code iteration cycle.

Purpose: This is required for certification and accreditation.

#### D-3: Code Scans

Due Date: Updated at the PMR with a final review at code completion.

Format: Automated output is authorized for delivery. Vendor choice but the deliverable must show the results of the scans meet the requirements of section 1.5.5.4.2.3 of the BPA.

Standard: Scans will cover 100% of all code written in support of this PWS.

Performance Criteria: Zero high, zero critical, zero category 1 and zero category 2 substantiated vulnerabilities are identified. For false positive results, 100% are explained in detail why the identified area is a false positive.

Frequency of Assessment: Monthly

Method of surveillance: Periodic inspection via results provided at each PMR.

Purpose: Required for certification and accreditation

#### D-4: Metrics.

Due Date: Updated at each PMR.

Format: Provide burndown charts, schedule status, and developer velocity at a minimum.

Standard: Metrics shall describe current status in the context of historical progress with projections of future performance.

Performance Criteria: Reflect the current state and status accurately at least 80% of the time.

Frequency of Assessment: Monthly

Method of surveillance: Periodic inspection via results provided at the PMR and end of code iterations.

Purpose: Transparency to the government and status of the overall plan.

#### D-5: Program Management Review

Due Date: First Tuesday of each Month at 10:00 AM. Although the BPA requires a PMR every two weeks, the PMR for this PWS is not required more often than once a month.

Format: PowerPoint slide deck covering present current program cost, schedule, technical and risk statuses. Include metrics and updated schedules. Meeting minutes posted by COB Wednesday after the PMR and sent via email.

Standard: Each task is covered showing current status with issues emphasized and details of risk mitigation on those issues.

Performance Criteria: Slides are received 24 hours in advance at least 80% of the time. Meeting minutes are posted by 5:00 PM the day after the PMR and sent out via email at least 80% of the time.

Frequency of Assessment: Monthly

Method of surveillance: Periodic inspection via results provided at the PMR Purpose: Status for the government and records.

#### D-6: Status Meeting.

Due Date: Every Tuesday at 10:00 AM when a PMR is not scheduled.

Format: Provide a meeting outline in electronic format, Microsoft Office Word 2010 preferred, PowerPoint slides are optional. Meeting will cover items and issues that have changed since last status meeting. This should take no longer than 30 minutes and may be cancelled if no changes exist.

Standard: Each task is covered showing current status with issues emphasized and details of risk mitigation on those issues.

Performance Criteria: Outline received 2 hours in advance at least 80% of the time. Meeting minutes are posted by 5:00 PM the day after the status meeting and sent out via email at least 80% of the time.

Frequency of assessment: Monthly

Method of surveillance: Periodic inspection via results provided at the meetings and government records.

Purpose: Government records

#### D-7: Unit Test Coverage.

Due Date: Updated report at each PMR and a final report at code complete.

Format: Vendor choice, electronic format, Microsoft Office Word 2010 preferred.

Standard: Show percentage of code written versus code covered by unit tests. Show the results of the unit tests as of the latest compile.

Performance Criteria: At least 80% of all testable code has unit test coverage Frequency of Assessment: Monthly

Method of surveillance: Periodic inspection via results provided at each PMR. Purpose: Unit tested code provides a solid code base if implemented correctly. Changes to a code base that affects other areas are identified immediately. Results of this proof will be documented.

#### D-8: Project Plan.

Due Date: Updated plan by 5:00 PM the beginning day of a code writing iteration

Format: Microsoft Project preferred or equivalent format showing the overall schedule for the code iteration cycle.

Standard: In the plan, the current iteration will be depicted at the PBI level (or equivalent). The previous iteration will show updated status at the PBI level (or equivalent). Future iterations will provide feature level details.

Performance Criteria: Current iteration covers 100% of PBIs (backlog items or equivalent) and for the previous cycle all PBIs are updated accurately at least 80% of the time.

Frequency of Assessment: Monthly

Method of surveillance: Periodic inspection via results provided at beginning and end of a code iteration cycle.

Purpose: provides a baseline for metrics.

#### D-9: Capabilities Briefing and Demonstration.

Due Date: At the end of each code iteration with a full demonstration at acceptance..

Format: Software demonstration showing compliance with each requirement from backlog worked or specific requirements. Code review if demonstration is not possible is permitted. Also show exploratory use of the software via common use scenarios whenever possible. Record the demonstration and post the recording in the IDE.

Standard: The software remains stable as each requirement is demonstrated. Performance Criteria: Zero iteration items are missed two demonstrations in a row. At least 70% of planned items to be completed in the iteration are demonstrated. At **final** demonstration, no more than one unhandled exception with zero crashes during the demonstration and exploratory use..

Frequency of Assessment: As required

Method of surveillance: Periodic inspection via results provided at iteration completion.

Purpose: To provide a demonstration to the government for accepting the software – expect other stakeholders to attend the demonstration.

#### D-10: Requirements Traceability Matrix (RTM)

Due Date: Updated at the end of each software development iteration by 5:00 PM and finalized by code completion.

Format: Show each requirement/backlog item, relation to the code section and work items and relation to the test plan with comments as necessary.

Standard: The RTM covers 100% of the backlog items worked.

Performance Criteria: At least 80% of the time the RTM is updated on time with accurate updates.

Frequency of Assessment: Monthly

Method of surveillance: Periodic inspection via results provided at end of a code iteration cycle.

Purpose: For validation of requirements to other deliverables.

NOTE: Only one traceability matrix is required. This deliverable is required when CLIN 0004 is not exercised. See note in deliverable DQ-2 for further clarification.

#### D-11: STIG Review.

Due Date: Before writing any code.

Format: Vendor choice, electronic format, Microsoft Office Word 2010 preferred.

Standard: Provide statements that STIG reviews were accomplished for the following STIGS before writing code:

- Application Services STIG
- Application Security & Development STIG
- o Database STIG
- o .NET Framework Security Checklist
- Web Application STIG
- o Air Force Ports, Protocols and Services Documentation Guide

Performance Criteria: Each developer provides proof within 1 month of writing code and reviews yearly.

Frequency of Assessment: Yearly

Method of surveillance: Periodic inspection via contractor and government records.

Purpose: Following the STIGs provides an easier path for certification and accreditation.

#### D-12: Information Assurance Plan Updates.

Due Date: At the first PMR, updated at each PMR.

Format: Microsoft Office Word 2010 or 2007 format

Standard: Describe how each IA requirement for planned and executed iterations are met with coordination of the WEdge PMO IAM. List of IA requirements will be reviewed by the PMO IAM and should include controls from a MAC II Classified system, STIG compliance and other checklists as applicable.

Performance Criteria: Show that no category 1 items are missing and that no category 1 findings are present.

Frequency of assessment: Monthly

Method of surveillance: Periodic inspection via results provided at the PMR Purpose: Providing this plan ensures transparency to issues that may impact certification and accreditation, ensures security in the code and a quick and easy transition to certification.

#### D-13: Ports, Protocols and Services (PPS) Worksheet

Due Date: Finalized by code completion.

Format: Following attached Excel Worksheet format.

Standard: Follow the guidelines for the PPS Worksheet.

Performance Criteria: PPS identifies all ports and protocols in use by the application.

Frequency of assessment: At each code completion

Method of surveillance: Periodic inspection via results provided at code completion

Purpose: Required for certification and accreditation.

#### D-14: Database Schema

Due Date: Finalized by code completion.

Format: Vendor choice, electronic format, Microsoft Office 2010 editable format preferred. Automated output is authorized in an electronic format.

Standard: Follow the content desired by IEEE (or equivalent) for an entity relationship diagram (ERD) depicting all databases and their schemas.

Performance Criteria: Delivered on time with over 95% of database tables referenced with relationships clearly identified.

Frequency of assessment: At each code completion

Method of surveillance: Periodic inspection via results provided at code completion

Purpose: Required for certification and accreditation.

#### D-15: Data Accession List.

Due Date: Two weeks prior to the end of the period of performance of this PWS and each option year.

Format: Vendor choice, electronic format, Microsoft Office Word 2010 preferred.

Standard: Covering the requirements of section 1.5.6.5 of the BPA.

Performance Criteria: 95% of all purchased items accounted for in the list versus government records.

Frequency of Assessment: Yearly.

Method of surveillance: Direct inspection of vendor and government records.

Purpose: For transfer of equipment and accountability

#### D-16: Trip Report

Due Date: Within 48 hours of return (alternate time schedules may be coordinated and documented in writing)

Format: Vendor choice, electronic format, Microsoft Office Word 2010 preferred.

Standard: An overview of any trip taken on government funds, daily summaries, personnel contacted and any opportunities or roadblocks that occurred due to the trip.

Performance Criteria: Representative account of the trip overall.

Frequency of Assessment: Monthly

Method of surveillance:

Purpose: To provide insight into the trip and benefit to the government.

#### D-17: Technical Software Design Document (SDD) and Reviews.

Due Date: Updated at the PMR and final by code acceptance.

Format: Microsoft word 2010 preferred. Depict content in a format similar to the IEEE standard for an SDD. Details should be at a technical level showing code and designs that should not go deeper than the class level unless necessary for understanding. Update all previous versions of the SDD as a living document.

Standard: Technical paper showing code and designs to a depth of the class level or deeper if necessary for understanding. Processes are in place to update and maintain the SDD during code iterations.

Performance Criteria: Designs are detailed to a level of depth where the overall design and architecture are understood by another developer. Each requirement of the backlog is covered in the SDD and at least 80% of all code written under this PWS is covered by the SDD.

Frequency of Assessment: Monthly

Method of surveillance: 100% inspection of final documentation.

Purpose: To provide validation of understanding by both coders and the government.

#### D-18: Software Requirements Specification (SRS)

Due Date: Within 30 calendar days of award and updated iteratively at the PMR with the final due at code acceptance.

Format: Modify the SRS of the current system to include updates to the system.

Standard: IEEE standard or equivalent is followed for an SRS. The SRS is updated showing work accomplished during the iterative cycle. Final product covers all requirements.

Performance Criteria: 100% of all requirements are covered in the document. SRS is updated on time at least 80% of the time.

Frequency of Assessment: Monthly

Method of surveillance: Periodic inspection via results provided at each PMR. 100% inspection at acceptance.

Purpose: To provide a baseline understanding of the overall system.

#### D-19: Software Version Description (SVD)

Due Date: Finalized by code acceptance.

Format: Comply with the SVD format compliant with DI-IPSC-81442A.

Standard: The SVD is filled out/updated and complies with the requirements of the document as depicted.

Performance Criteria: SVD covers all installed items of the software.

Frequency of Assessment: At each code acceptance no less than once a quarter.

Method of surveillance: 100% inspection via results provided

Purpose: Required for certification and accreditation.

#### D-20: Installation Guide.

Due Date: Finalized at code acceptance.

Format: Vendor choice, electronic format, Microsoft Office Word 2010 preferred.

Standard: Provide a detailed guide on how to install the software.

Performance Criteria: Zero technical errors with less than 10% content errors.

Frequency of Assessment: At each code acceptance no less than once a quarter.

Method of surveillance: 100% inspection via results provided

Purpose: Provided to final customer and for certification and accreditation purposes.

#### D-21: PowerPoint Technical Design Briefing.

Due Date: Finalized at code acceptance.

Format: Electronic format, Microsoft Office PowerPoint 2010 preferred.

Standard: Provide sufficient detail that another software engineer could understand fully the architecture. Should be at the class level at a minimum and describe all interfaces with other actors showing all major features and requirements.

Performance Criteria: Slide deck delivered on time covering at least 75% of all requirements of the PWS.

Frequency of Assessment: At each code acceptance no less than once a quarter.

Method of surveillance: 100% inspection via results provided

Purpose: To provide the government with information on the technical solution for the product. For technical developers to understand the development of the software.

#### D-22: PowerPoint System Briefing

Due Date: Finalized at code acceptance.

Format: Electronic format, Microsoft Office PowerPoint 2010 slide deck preferred.

Standard: A complete overview of the functions within the system explained in a slide format that is meant for Aircrew understanding. Avoid detailed technical descriptions but include them if necessary to explain the product.

Performance Criteria: Delivered on time with slides covering 90% of functions of the system (a function includes 1 or more requirements). Slides demonstrate functionality without running the software.

Frequency of Assessment: At each code acceptance no less than once a quarter.

Method of surveillance: 100% inspection via results provided Purpose: Provide a basis for training and further briefings

#### D-23: Architectural DODAF Diagrams

Due Date: Finalized by feature complete.

Format: Following the DODAF version 2.02 standards – Attached.

Standard: Complete diagrams of SV-1 and OV-1 IAW DODAF v 2.02

specifications. Completing other DODAF viewpoints to depict relationships is encouraged.

Performance Criteria: SV-1 and OV-1 are complete and acceptable by WEdge PMO Information Assurance Manager.

Frequency of Assessment: At each feature complete no less than once a quarter.

Method of surveillance: 100% inspection via results provided

Purpose: Required for certification and accreditation.

#### D-24: White Paper.

Due Date: By feature complete

Format: Vendor choice, electronic format, Microsoft Office Word 2010 preferred.

Standard: Description of the product condensed to a single page

Performance Criteria: Description is accurate and fits on one piece of paper.

Frequency of Assessment: At each feature complete no less than once a quarter.

Method of surveillance: 100% inspection via results provided Purpose: To describe quickly the purpose of the product.

#### D-25: Complete User's Guide

Due Date: Finalized at code acceptance.

Format: Vendor choice, electronic format, Microsoft Office Word 2010 preferred. Also provided as electronic help imbedded in the product.

Standard: Logically laid out structure covering features of the product. Written at a high school level.

Performance Criteria: At least 80% of the overall system requirements of the PWS must be covered in the user's guide.

Frequency of Assessment: At each code acceptance no less than once a quarter.

Method of surveillance: 100% inspection via results provided

Purpose: Certification and Accreditation. Final user's manual will be distributed with the software.

#### D-26: Short 1 Page Quick Reference User Guide

Due Date: By feature complete

Format: Vendor choice, electronic format, Microsoft Office Word 2010 preferred.

Standard: One to two pages covering the essentials of the product and how to use it.

Performance Criteria: At least 2 diagrams or pictures are present and the text describes system use without the need for much detail.

Frequency of Assessment: At each feature complete no less than once a quarter.

Method of surveillance: 100% inspection via results provided

Purpose: Certification and Accreditation. So that a user does not HAVE to read the overall user documentation.

## **1.6.2** Deliverables for optional task "Software Quality Assurance Support" These deliverables are required if optional task 1.5.3.5 "Software Quality Assurance Support" is awarded.

#### DQ-1: Full Software Test Plan with Results

Due Date: At each PMR as a review, continually updated from all product backlog work. Final results at acceptance with complete results.

Format: Electronic Microsoft product preferred - vendor choice, but must be editable. Include steps for each test so they are repeatable and provide traceability so each requirement is fully tested. Provide sections that include fuzz, functional, security and regression testing. Show how each test relates to the product backlog requirements. Pass/fail results shall be provided.

Standard: Each backlog item or requirement is covered by applicable tests. At least one entry for each type of test is given.

Performance Criteria: 100% of requirements are identified and accurately reported for traceability. At least 95% of all tested requirements passed and 100% are shown passed at the next presentation (the remaining 5% at next iteration review are shown).

Frequency of Assessment: Monthly

Method of surveillance: Periodic inspection via results provided at the monthly PMR.

Purpose: This will be used to pass on to 3<sup>rd</sup> party testing agencies and provide a way to reproduce a complete regression test and is required by C&A.

#### DQ-2: Requirements Traceability Matrix (RTM)

Due Date: At each PMR as a review, continually updated from all product backlog work. Final results at acceptance with complete results.

Format: For each product, show each requirement/backlog item, relation to the SRS, relation to the SDD, code section meeting the requirement, relation to the test plan, comments as necessary. Correlated with the RTM required in 1.6.1 D-10 or other vendors in a single document.

Standard: The RTM covers 100% of the requirements worked and tested. Performance Criteria: At least 80% of the time the RTM is updated on time with accurate updates.

Frequency of Assessment: Monthly

Method of surveillance: Periodic inspection via results provided at end of a code iteration cycle.

Purpose: For validation of requirements to other deliverables.

NOTE: Only one traceability matrix is required. This deliverable is only required when CLIN 0004 is exercised and supersedes the requirements stated in deliverable D-10.

#### 1.6.3 Inspection

All deliverables will be reviewed and inspected IAW government's Quality Assurance Surveillance Plan (QASP) from this PWS. Quality Assurance Evaluations are accomplished by a Contracting Officer's Representative (COR) at a frequency identified in the QASP. These reviews are written up and approved by the contracting officer within 3 weeks of finalization. Any noted deficiencies and discrepancies to include compliance with the PWS, will be brought to the attention of the contractor and contracting officer. The contactor may be subject to re-inspection charges associated with corrective action.

#### 2 GOVERNMENT FURNISHED PROPERTY AND SERVICES

#### 2.1 General Information

- Government will provide access to regulations for services rendered to ensure compliance upon request from the service provider.
- The WEdge Agile Process document can be found at (http://wedge.hpc.mil/WEdgeScrum Process.pdf)

#### 2.2 Government furnished equipment

The government will provide equipment to ensure successful operations of Microsoft Exchange, Virtual Server storage, Team Foundation Server, SharePoint and Serena. The provider is expected to provide individuals with network compliant computers to accomplish this work.

#### 2.3 Government furnished software

- The government will provide the server licenses for Team Foundation Server (TFS) and upgrades. Client licenses for TFS are the responsibility of the service provider.
- The government will provide licenses and access licenses for SharePoint.
- The government will provide licenses and access to Serena, if used.
- The government will provide licenses and access to Hewlett Packard Fortify.
- The government will provide licenses and access to a virtual server farm.
- The government will provide licenses for Microsoft Exchange in support of the WEdge.hpc.mil domain.
- The government will provide licenses and access to the USAFA research network via Virtual Private Network (VPN)

#### 3 SharePoint common documents

The following items are located on the government SharePoint site and may be requested from Heidi Sawyer and Kortni Nevins at any time.

<u>Num</u>	File Name	Document Date	<u>Description</u>
		or Last Save	
		<u>Date</u>	
1	WEdge Visual Studio and	11/20/2010	WEdge coding standards
	VB 2008 Standards.pdf		
2	Configuration Management	4/3/2012	Configuration Management Plan for WEdge
	Plan ver 1.1.pdf		
3	dd254 Blank.pdf	4/6/2012	DD254 blank fillable document. Route
			through McCollum and Berry after filling out
			before final signature.

# **Quality Assurance Surveillance Plan** (QASP)

### for the

# WEdge Software Maintenance (CALL ORDER #4)

**Performance Work Statement (PWS)** 

ID08120040

Current as of 26 July 2012



#### **Contracting Officer Representative**

The COR for this Call Order is: Andrew J. Berry, Lt Col, USAFR Director, Warfighter's Edge Office 719-333-9798, DSN 333 Cell 719-235-7724

#### Tools of surveillance for the Call Order

#### 1. ONE-HUNDRED PERCENT INSPECTION

The COR will inspect and evaluate the contractor's performance each time it is performed. The results of the contractor's overall performance is then evaluated to determine acceptability of the service provided.

#### 2. PERIODIC INSPECTION

These items are inspected using periodic surveillance (daily, weekly, monthly, quarterly, etc.) as determined by the COR. The results of the periodic surveillance inspections may be used as the basis for actions toward the contractor. In such cases the Inspection of Services clause becomes the basis for the contracting officer's actions.

#### 3. CONTRACTOR METRICS

Metrics used to measure performance objectives stated in the PWS. These metrics are usually developed and maintained by the contractor. QASP will be updated to include the specific contractor metrics (standard).

#### 4. METHOD OF INSPECTION

Inspection will be performed by the COR on a regular basis as stated in the PWS. This will include but is not limited to the review of reports, testing documentation and the processes performed by the contractor.

#### 5. INCENTIVES

Incentives are centered around CPAR feedback.

#### **Reported Data**

The contracting officer representative (COR) will provide a monthly report by the 15<sup>th</sup> of the following month to the contracting officer. This report will provide metrics on compliance with all deliverables of the PWS and inspection results IAW this assessment plan.

The code iteration length will be reported in the monthly COR report.

Contractor metrics will be included in the monthly COR report.



#### Assessment Plan: CLIN 0001, CLIN 0002, CLIN 0003 and CLIN 0004.

#### **Performance Objective: STIG Reviews**

PWS Section: 1.6.1 D-11

Due Date: Before code is written

Performance Threshold: Written1 proof within 1 month of writing code that reviews have

been accomplished, updated yearly.

Frequency of Assessment: Yearly.

Method of surveillance: Periodic inspection via contractor and government records.

Positive Incentive: A positive CPAR rating will be given. Negative Incentive: A negative CPAR rating may be given.

#### **Performance Objective: Monthly PMR Meeting**

PWS Section: 1.6.1 D-1 | D-3 | D-4 | D-5 | D-7 | D-12 | D-17 | D-18

Due date: First Tuesday of the Month at 10:00.

Performance Threshold: Display unit test coverage on all written code showing at least 80% code coverage, display 100% of each backlog item or requirement and show it is covered by at least one functional test, display results from Fortify scans showing Zero high, zero critical, zero category 1 and zero category 2 substantiated vulnerabilities are identified. For false positive results, 100% are explained in detail why the identified area is a false positive, display metrics describing the state of current status versus planned status accurately at least 80% of the time. IA plan shows that no category 1 items are missing and that no category 1 findings are present. The SDD shows code and designs to a depth needed for technical understanding with each requirement or backlog item is covered in the SDD and at least 80% of all code written under the PWS is covered by the SDD. The SRS has 100% coverage of all requirements for the product updated at least 80% of the time. At least 80% of all meetings start on time with deliverables 1 hour prior to the meeting. 100% of PMRs and status meetings are started within the same week with deliverables provided before meeting begins.

Frequency of Assessment: Monthly.

Method of surveillance: Periodic inspection via review of deliverables from D-1, D-3, D-4, D-7 and D-12 and government logs.

Positive Incentive: A positive CPAR rating will be given. Negative Incentive: A negative CPAR rating may be given.

#### **Performance Objective: Status Meeting**

PWS Section: 1.6.1 D-6

Due date: Every Tuesday of the Month at 10:00 except when a PMR is done Performance Threshold: Each item needing update from the PMR is updated with an outline received at least 2 hours in advance of the meeting. Minutes are posted by 5:00 PM the Wednesday after the status meeting at least 80% of the time.

Frequency of Assessment: Monthly.

Method of surveillance: Periodic inspection via results provided at the meetings and government records.



Positive Incentive: A positive CPAR rating will be given. Negative Incentive: A negative CPAR rating may be given.

<u>Pe</u>

#### Performance Objective: End/Beginning of a code iteration

PWS Section: 1.6.1 D-2 | D-8 | D-9 | D-10|

Due Date: After the first day of a code iteration by 5:00 PM

Performance Threshold: Code reviews are documented and completed timely 80% of the time, Current iteration covers 100% of PBIs (backlog items or equivalent) and for the previous cycle all PBIs are updated accurately at least 80% of the time, code demonstrations don't miss any item two demonstrations in a row with at least 70% of all planned items in the iteration are demonstrated. At least 80% of the time the RTM is updated on time with accurate updates.

Frequency of Assessment: Monthly

Method of surveillance: Periodic inspection via review of deliverables and government logs

Positive Incentive: A positive CPAR rating will be given. Negative Incentive: A negative CPAR rating may be given.

#### Performance Objective: Feature Complete

PWS Section: 1.6.1 D-23 | D-24 | D-26 Due date: At each feature complete

Performance Threshold: DODAF Diagrams will have complete diagrams of SV-1 and OV-1 IAW DODAF v 2.02 specifications. The white paper description is accurate and fits on one piece of paper. The quick reference user guide depicts at least 2 diagrams or pictures are present and the text describes system use without the need for much detail.

Frequency of Assessment: At feature complete, no less than once a quarter

Method of surveillance: 100% inspection via deliverables posted.

Positive Incentive: A positive CPAR rating will be given. Negative Incentive: A negative CPAR rating may be given.

#### **Performance Objective: Code Completion**

PWS Section: 1.6.1 D-1 | D-2 | D-3 | D-7 | D-10 | D-13 | D-14 Due Date: At the conclusion of code writing for a given effort.

Performance Threshold: PPS identifies all ports and protocols in use by the application, database schemas show over 95% of database tables referenced with relationships clearly identified.

FINAL PRODUCTS DELIVERED for D-1, D-2, D-3, D-7, D-10 meeting the same threshold requirements as listed in their periodic deliveries.

Frequency of Assessment: Upon every code completion date, no less than once a quarter. Method of surveillance: Periodic inspection via review of deliverables and government logs.

Positive Incentive: A positive CPAR rating will be given. Negative Incentive: A negative CPAR rating may be given.



#### **Performance Objective: Code Acceptance**

PWS Section: 1.6.1 D-9 | D-17 | D-18 | D-19 | D-20 | D-21 | D-22 | D-25

Due Date: At the conclusion of code writing and agreed upon acceptance date for items worked from the backlog or requirements.

Performance Threshold: A full capabilities briefing where no more than one unhandled exception occurs with zero crashes during the demonstration and exploratory use. The SVD covers all installed items of the software IAW desired format. Installation guide has zero technical errors and less than 10% content errors. PowerPoint technical briefing has sufficient detail that another software engineer could understand fully the architecture at the class level at a minimum describing all interfaces with other actors showing all major features and requirements covering at least 75% of all code written in support of the PWS. For the PowerPoint System Briefing, the show has a complete overview of the functions of the system while avoiding detailed technical descriptions with slides covering 90% of functions of the system demonstrating functionality without running the software. The user's guide covers all user exposed features of the product with at least 80% of the code written covered in the user's guide. The user's guide is written for understanding at at a high school level.

FINAL DELIVERY of D-17, D-18 meeting the same criteria as the PMR.

Frequency of Assessment: Upon every code acceptance date, no less than once a quarter.

Method of surveillance: Periodic inspection via delivery of the briefing.

Positive Incentive: A positive CPAR rating will be given. Negative Incentive: A negative CPAR rating may be given.

#### **Performance Objective: Data Accession List**

PWS Section: 1.6.1 D-15

Due Date: Two weeks prior to the end of a period of performance.

Performance Threshold: Delivered on time with 95% of all purchased items accounted

for in the list versus government records.

Frequency of Assessment: Yearly

Method of surveillance: 100% inspection of the deliverable. Positive Incentive: A positive CPAR rating will be given. Negative Incentive: A negative CPAR rating may be given.

#### **Performance Objective: Trip Report**

PWS Section: 1.6.1 D-16

Due Date: Within 48 hours of a return from a trip.

Performance Threshold: Deliverable depicts a representative account of the overall trip

depicting any opportunities or roadblocks that occurred during the trip.

Frequency of Assessment: Monthly

Method of surveillance: 100% inspection via delivery of the report.

Positive Incentive: A positive CPAR rating will be given. Negative Incentive: A negative CPAR rating may be given.



Assessment Plan: CLIN 0004 - "Software Quality Assurance Support" section 1.6.2

#### Performance Objective: Program Management Review (PMR)

PWS Section: 1.6.2 DQ-1 | DQ-2

Due date: First Tuesday of the Month at 10:00.

Performance Threshold: Test plans show each backlog item or requirement is covered by applicable tests. At least one entry for each type of test is given. 100% of requirements are identified and accurately reported for traceability. At least 95% of all tested requirements passed and 100% are shown passed at the next presentation (the remaining 5% at next iteration review are shown). The RTM covers 100% of the requirements worked and tested updated accurately at least 80% of the time.

Frequency of Assessment: Monthly

Method of surveillance: Periodic inspection via deliverables posted.

Positive Incentive: A positive CPAR rating will be given. Negative Incentive: A negative CPAR rating may be given.

#### **Performance Objective: Code Acceptance**

PWS Section: 1.6.2 DQ-1 | DQ-2 Due date: At each code acceptance

Performance Threshold: Final deliverables of DQ-1 and DQ-2 meeting the same criteria

as the PMR.

Frequency of Assessment: At code acceptance, no less than once a quarter

Method of surveillance: 100% inspection via deliverables posted.

Positive Incentive: A positive CPAR rating will be given. Negative Incentive: A negative CPAR rating may be given.

#### PERFORMANCE REVIEW MEETINGS

Performance metrics and results will be reviewed on a monthly basis to include PWS compliance. Should performance be determined unacceptable, the Government will notify the contractor and allow opportunity for improvement. The purpose of these meetings is to maintain a mutually cooperative working environment to foster successful Contractor performance and quality services delivered to the Government.

# Request for Quotation GSA Project Number ID08120040

United States Air Force Academy (USAFA)
Institute for Information Technology Applications (IITA),
Wedge Software Maintenance

Due Date: August 30, 2012











Submitted to:
Kortni Nevins, Contract Specialist
Email: kortni.nevins@gsa.gov
Heidi Sawyer, Contracting Officer
Email: heidi.sawyer@gsa.gov

Submitted by:
Team SDNC;
SofTec Solutions, Inc
developersDen, Inc
Next Tier Concepts, Inc
Chenega Consulting, LLC







August 30, 2012

Heidi Sawyer GSA, Federal Acquisition Service Bldg 41, Room 145 Denver, CO 80225

### RE: GSA Project Number ID08120040, WEdge Software Maintenance at United States Air Force Academy

Dear Ms. Sawyer:

Team SDNC has prepared the following proposal for the United States Air Force Academy (USAFA), Institute for Information Technology Applications (HQ USAFA/IITA) for WEdge Software Maintenance Call Order 4. Having thoroughly reviewed the solicitation requirements, we are confident in our ability to perform on this effort.

Team SDNC takes no exceptions to the stated requirements and we agree to hold our offer firm for 180 days from the date specified for receipt of offers, 30 August 2012. We acknowledge receipt of solicitation, dated 16 August 2012, and Amendment 0001, dated 27 August 2012.

We look forward to discussing the contract details and responding to any additional questions. Please contact me at 303.662.1010 or email us at <a href="mailto:sales@softecinc.com">sales@softecinc.com</a>.

Sincerely,



Frank Sain,

Chief Operating Officer (COO)

SofTec Solutions, Incorporated

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### 1. Introduction

Team SDNC is pleased to submit this proposal to the United States Air Force Academy (USAFA), Department of Education, Institute for Information Technology Applications (HQ USAFA/DFEI), Warfighter's Edge Program Management Office (PMO) for WEdge Software Maintenance; Call Order 4. Our experience is directly related to this work and we are highly qualified to perform on this Call Order.

Our team has supported the USAFA WEdge Program since its inception; our projects include developing the current Software Development Lifecycle, Agile/Scrum processes, and training the initial cadre of IITA personnel. As incumbents on the USAFA IITA WEdge program, we are familiar with the networks, software, hardware, and processes and procedures at the USAFA, and we will provide the same dedicated support on this Call Order that USAFA has come to expect. Our proposed personnel for this contract include experienced incumbents from Call Order 1, with additional skilled personnel to support the specified requirements for Call Order 4.

Our team and our management approach for this Call Order are the same as described in our response to the BPA proposal and Call Order 1. We have highlighed only those areas that require additional clarification or where this Call Order's requirements are different.

# 2. Technical Approach

### 2.1 Description

Team SDNC personnel have been providing the highest quality of support for software engineering, product lifecycle sustainment, Team Foundation Server (TFS) configuration management, and engineering consultation for the Headquarters, USAF Academy, Department of Education, Institute for Information Technology Applications (HQ USAFA/DFEI), Warfighter's Edge PMO for several years and will continue to do so on this Call Order.

## 2.2 Objective

Our team has provided software maintenance services for most of the products for which the WEdge PMO has oversight, including extensive Microsoft Team Foundation Server (TFS) capability and subject matter experts (SME). We have proven our ability to work effectively in a highly collaborative environment and produce the required deliverables in a timely fashion. Team SDNC engineers have provided the software engineering to modify, perfect, and adapt WEdge products to ensure product viability. Our personnel have continuously documented the processes and required deliverables, and ensured configuration management of WEdge software and processes. Our Task Lead/Senior Systems Architect/TFS SME has provided continuous professional consultation on design and validation of algorithms, architecture, and extensibility frameworks. Our team consists of software development professionals with more than 30 years of experience who are fully capable of providing consultation and direction on all phases of the software development lifecycle (SDLC).

## 2.3 Service Provider Responsibilities

Team SDNC will provide mobile development computers, docking stations, and dual screens for use on the WEdge network for development and management purposes as shown in Section 3.2. This equipment will become property of the Government upon completion of the contract. We have included licenses for Visual Studio 2010 (TFS) to support WEdge Software Maintenance tasks. Should the Government decide to provide this equipment as Government Furnished Equipment (GFE), Team SDNC will work directly with the Contracts Officer (CO) to adjust pricing as required.

### 2.3.1 Performance Category 1: Geospatial Services (PWS 1.5.1)

None.

# 2.3.2 Performance Category 2: Software Development and Research (PWS 1.5.2)

None.

# 2.3.3 Performance Category 3: Software Maintenance and Modification (PWS 1.5.3)

We have played key roles in the architecture, design, implementation, documentation, deployment, and support of the WEdge architecture and software systems. Our intimate familiarity with these products uniquely positions our team to provide software maintenance and modification services for all current and future backlog tasks. Our experience with the WEdge Program has provided us not only with a deep technical knowledge of these products, but also significant understanding of the involved user communities, their needs, and their challenges. We have played key roles in assisting the WEdge Program in bringing these capabilities to the Warfighter, from the automated briefings of WEBS, collaboration capabilities of WEdge Shuttle, route translations provided by the Mission Planning Route Translator (MPRT), to the extensible framework of the WEdge Extensibility Framework (WEF).

#### 2.3.3.1 CLIN 0001: Software Maintenance

Historically, we have found that a software developer is able to sustain an average of approximately six (6) hours per day of pure development effort. Based on the requirement of 100 hours per week of development against the product backlog, combined with the high number of deliverables for this effort, we have carefully crafted our team to ensure that:

- We provide the required level of development without sacrificing quality in the overall software development process.
- All of the required deliverables will be of the highest quality and delivered according to their specific schedules.

Our proposed team is comprised of one (1) software architect/task lead, one (1) development lead, two (2) senior developers, one (1) part-time junior developer, one (1) part-time technical writer, and one (1) optional senior SQA engineer. This composition will provide the necessary resources to successfully meet all of the requirements of the WEdge PMO. If CLIN 0004 is not funded, our development team will perform quality assurance on all our code and work with the WEdge PMO to test the software at a level that ensures high quality and reliable product for the Warfighter. If the CLIN 0004 is funded, our proposed SQA engineer will perform the additional full rigorous SQA testing and document all findings and corrective actions to ensure the system is mission ready.

#### 2.3.3.1.1 WEdge Extensibility Framework (WEF)

Extensible frameworks provide the capability of designing componentized software applications with the ability to dynamically load software components which extend or modify the applications behavior. Additionally, these frameworks allow for standardized component interfaces and behaviors which reduce development time and facilitate third-party extensions.

Microsoft's Managed Extensibility Framework (MEF), while very powerful, leaves a significant portion of development in the hands of the software developer. MEF is also fairly complex and cumbersome. As an alternative, our team designed and created the WEdge Extensibility Framework (WEF). This set of tools and technologies is focused on providing the software developer a complete toolkit which is not only easier to work with, but provides additional functionality as compared to MEF. Our primary goal

will be to incorporate WEF into every WEdge product, allowing extensions to be reused within these applications, as well as across applications.

WEF facilitates reusable delegates, interfaces, data types, and inheritable base classes that make WEdge products easily and consistently extensible. Once a development team is exposed to WEF and WEdge applications where WEF has been implemented, the consistency and uniformity across all WEdge products give the development team an automatic level of familiarity with any WEdge application, despite having never worked on a particular application. Our team knows the importance of this subtle area of re-usability, and we can ensure WEdge products can pass from one development team to the next while maintaining core integrity and consistent quality.

WEF is designed to foster interoperability between applications and products as much as it is designed for extensibility. A deep understanding of WEF is required in order to utilize it to its fullest potential. Applications should be able to share algorithms, components, and customer-specific plug-ins. WEdge software can mold itself to a specific customer by accepting custom plug-ins. Coupled with a professional Software Development Kit (SDK), WEF helps ensure even applications and application plug-ins created from scratch come out with the expected level of consistency and extensibility in all WEF-enabled WEdge software applications. We have successfully demonstrated our in-depth knowledge of WEF by way of WEBS prototypes which leverage the advanced capabilities of WEF, and we also implemented this framework as a core component of the MPRT product. On rare occasions WEF may require modifications, and when it does our team possesses a complete understanding of the entire architecture because Team SDNC includes the original WEF designers. We ensure that the quality and integrity of WEF are maintained throughout the entire framework.

SDKs can save many hours of time and work, as well as serve as the first line of specification adherence assurance. While offering good functionality, the WEF SDK still needs to be completed. We will add several new templates to support the creation of applications and components from scratch, including one template that makes creating WEdge applications easier and consistent includes the MVC (Model-View-Controller) model for applications. MVC is the standard modern model used for creating applications. A WEF template that automatically generates the MVC model out of the box will guide strict and consistent development in this direction. It will benefit the Government as well as the contractors performing the work by ensuring the design of finished products conforms to established standards.

#### 2.3.3.1.2 Mission Planning Route Translator (MPRT)

We understand the growing demand for the ability to seamlessly translate data from one mission planning system to another. This results from the active use of several different standard mission planning systems in use throughout the DoD today. While MPRT is currently a working proof of concept, we have the ability to turn it into a professional, seamless data translator that can be used in virtually any environment. This concept can be more generalized to say that many data-centric and data-critical systems can benefit from a dynamic data translation system.

Team SDNC is very familiar with the design and implementation of MPRT and MEF, and even more familiar with WEF. The WEF architecture was originally designed by one of our developers, therefore fully integrating WEF with existing MPRT code will be a straightforward task. Utilizing WEF, we will transform MPRT into a highly extensible and configurable product that delivers critical translation services to many areas in need of such services. Our team has worked closely with the developers at MITRE (JMPS Advanced Development Group), who created the MPRT prototype, to understand the architecture of the complex CLMP model and how it should be implemented for the most accurate translation.

Our in-depth understanding of the CLMP model will enable us to make the necessary changes to improve the overall performance of MPRT while offering the lowest program risk and highest quality for the program and its requirements. Our developers have recent experience with MPRT, and have identified areas that will greatly benefit from refactoring and/or rewriting. We have thoroughly documented these enhancements, and are ready to implement them without delay. A few possible enhancements to MPRT are as follows:

- Transform MPRT into a plug-in to products like CFPS and JMPS.
- Include MPRT as a Windows Explorer plug-in where right clicking on a file provides a number of translation choices.

Team SDNC's developers already have the necessary development environments and testing structures including virtual machines with various versions of JMPS or PFPS installed in place to expedite the development process. This will allow us to quickly and accurately test the data translation services between JRT and RTE files as these modules have an immediate application in the Air Force.

#### **2.3.3.1.3 WEdge Shuttle**

Simply stated, the WEdge Shuttle provides the user with the ability to share files across a network. The strength behind the Shuttle is in utilizing the powerful WEdge Architecture (via an API interface at Tier 2 and Tier 1) to move data automatically so that data created by one group can be displayed and updated by another. The Shuttle integrates seamlessly with FalconView and uses the Windows file system to manage file changes.

Team SDNC is well versed in the design and implementation of the WEdge Shuttle Client v1.2, and the current WEdge Master (Tier 2) and WEdge Repository (Tier 1). Since we originally created these solutions, modifications to these individual entities, while maintaining existing functionality, will be a straightforward task for our developers.

Our intimate understanding of the complex communication architecture between the client and tiers will enable us to make the necessary changes to improve the overall performance of the WEdge Shuttle while offering the lowest program risk. Our developers have recent experience with the WEdge Shuttle, Tier 2, and Tier 1 code, and have identified areas that would greatly benefit from refactoring and/or rewriting, thereby improving performance at all levels. We have thoroughly documented these improvements and are ready to implement them without delay. Among these potential enhancements are the following:

- Enrich the user interface to create a more intuitive and friendly user experience
- Add polling capabilities to the client when the client is active to prevent polling code from interfering with client code used to update the user interface
- Break down large files into transportable chunks to successfully upload/download large amounts of data, ensuring proper collaboration between clients
- Redesign the product to leverage the WEdge Extensibility Framework (WEF)
- Provide delivery receipts to clients, indicating success or failure of published documents
- Possible integration with JMPS
- Possible integration of MPRT functionality within Shuttle

In addition, Team SDNC developers have the necessary development environments and testing structures in place to expedite the development process including virtual machines, WEdge Master Servers, and a WEdge Repository.

#### 2.3.3.1.4 WEdge Briefing Software (WEBS)

Our team has been heavily involved with the WEdge Briefing Software (WEBS) since it was initially developed. The capability for creating automated PowerPoint briefings by utilizing data tags that are dynamically replaced with current data at runtime is an extremely powerful and unique feature. Our extensive understanding of the PowerPoint object model has enabled us to integrate and extend the capabilities of Microsoft Office within a custom application. We created the following key components of the WEBS application:

- WEdge Access Control List (WACL) and all of its associated functionality
- WEdge Sync to provide synchronization capabilities via SQL server
- The reporting system contained within the WEdge Instrument Panel (settings)
- The messaging capability (MSMQ) between the client and Tier 2
- The data access and business logic of Tier 2

Team SDNC members were the primary developers investigating and creating prototypes for possible future expansion of the capabilities of WEBS. Our approach for expanding these capabilities could include the following:

- Redesign the WEdge Instrument Panel (WIP) user interface to create a more intuitive and friendly user experience
- Break large files down onto transportable chunks to successfully upload/download large amounts of data, ensuring proper collaboration between clients
- Redesign the product to leverage the WEdge Extensibility Framework (WEF)

We understand the business case and many benefits that WEBS brings to the Warfighter and are well positioned to enhance and maintain this product.

#### 2.3.3.1.5 Tier Architecture - WEdge Master (Tier 2) and WEdge Repository (Tier 1)

WEdge Master (Tier 2) and WEdge Repository (Tier 1) are the foundation that WEdge Shuttle and WEBS are built upon. These two complex application servers provide local and remote file sharing and collaboration capabilities in a reliable and flexible fashion. Tier 1 and Tier 2 utilize technologies such as messaging (MSMQ), services (WCF and Windows), and data access (SQL Server). Our team is intimately familiar with these technologies and leveraging them effectively.

We were the primary engineers involved with the design and implementation of these products and have been providing maintenance and support services for a number of years. We possess extensive knowledge not only of the products, but also the environments in which they are deployed and the IA restrictions and requirements that govern their use in the DoD.

Our approach to continued maintenance of the WEdge Master and WEdge Repository may include:

- Installation support for both WEdge Master and WEdge Repository
- Extend the existing WEdge Master RSS interface to include all existing WEdge Master functionality, thereby transforming it into a true Service Oriented Architecture

#### 2.3.3.2 Process Validation

Our team assisted in the authoring of the current WEdge PMO Configuration Management Plan and coding standards. We have refined our agile development process into one that is highly effective while minimizing complexity and overhead. We believe a strong and unified approach to the software development process is critical for the future success of the WEdge Program. Team SDNC will provide full WEdge software support, provide suggestions for enhancements, and will assist in ensuring compliance to these guidelines by all development teams under the oversight of the WEdge PMO.

#### 2.3.3.3 Consultation

Team SDNC engineers have many years of experience in software architecture and design in a variety of public and private sector environments. We have a solid understanding of architectural best practices and in creating software designs that effectively leverage Microsoft tools and technologies as well as industry-proven software architecture and design patterns. We will continue to work closely with the WEdge PMO to ensure that their vision is accurately reflected in the products produced.

#### 2.3.3.4 CLIN 0002: Documentation Support

We understand the need for high quality documentation from a user experience perspective as well as in support of product development efforts. We believe our approach of teaming our engineers with an experienced technical writer will enable Team SDNC to provide documentation that is not only technically accurate, but fully meets the high standards expected by the WEdge PMO. Our proposed Technical Writer/Documentation Specialist is a published author, has more than 20 years technical writing experience, including conducting peer reviews, editing, collaborating with internal users to develop business requirements, and performing system tests usability and content verification. We plan on assisting the WEdge PMO by forming a document quality control team. This team would be comprised of various developers and user representatives, and be responsible for final quality review of all technical documentation. Due to the large number of technical documents included as deliverables, we have calculated the availability of our part-time Technical Writer at <sup>3</sup>/<sub>4</sub> time to ensure proper documentation.

#### 2.3.3.5 CLIN 0003: Supplementary Capability

Team SDNC is fully prepared to augment our current team as required by the WEdge PMO. Our planned approach to addressing this CLIN will be to add additional junior-level developers to our current team, pairing them up with our senior developers. These development teams provide for lower cost development efforts without sacrificing quality. Senior developers lead the design efforts and provide the high-level oversight to ensure that implementations are accurate, efficient, and highly maintainable.

#### 2.3.3.6 CLIN 0004: Software Quality Assurance Support

Team SDNC has been providing SQA support for the WEdge Shuttle, Point Analysis Tool (PAT), and MPRT during the past year. We have significant experience with all aspects of quality assurance and software testing including Visual Studio Test Edition. Our team is very familiar with DoD SDC configurations and requirements and has configured numerous test environments comprised of client workstations communicating with WEdge Master and WEdge Repository application servers. Our proposed (optional) SQA has been the incumbent WEdge SQA, and uses Team Foundation Server (TFS) product suite, including Visual Studio and Test Management System, to manage requirements and document testing. Team SDNC will provide our SQA formal TFS Test Engineer Training as part of this Call Order at no cost to the Government.

We have successfully implemented a testing philosophy which complements our agile development methodology and provides us the ability to identify issues early in the development lifecycle, resulting in significantly reduced development times and higher quality products for our customer.

#### 2.3.3.7 Key Personnel

Team SDNC's proposed personnel include the incumbent USAFA WEdge personnel and experienced engineers and senior developers who add individual value and expertise to each aspect of Call Order 4. The resumes attached in Appendix A represent the actual personnel who will perform on this Call Order; they will not be replaced without coordination with the COR. See Team SDNC's USAFA IITA BPA proposal for the resume of our BPA Program Manager, Mr. Martin Payne.

#### 2.3.3.7.1 WEdge Extensibility Framework Capabilities

The key WEdge individual in this area is Team SDNC's Chad Mello. Chad is the original architect and developer of WEF and possesses a unique level of knowledge of the framework and how to most effectively implement its capabilities into software applications. Chad brings a higher level of understanding of WEdge products development and improvements, as well as demonstrated knowledge and experience with WEF, MEF, SDK, and other WEdge tools. For additional information please see his resume in Appendix A.

#### 2.3.3.7.2 Team Foundation Server Configuration

The key individual in this area is Patrick Speer. He has demonstrated knowledge and experience in configuration of Team Foundation Server (TFS2010) including the check-in and check-out rules, daily builds, HP Fortify integration of daily builds, running unit tests, incorporating code metrics, and providing reports. Patrick has been utilizing and mentoring others in the effective use of Team Foundation Server (TFS) since the product's initial release. His experience includes everything from initial installation and configuration to its daily use in support of agile development processes. Patrick has been the integral SME since WEdge's inception. He leads WEdge Agile Software Development and Project Management, including project planning, Scrum sprint activities, and Program Management Reviews. For additional information please see his resume in Appendix A.

# 2.3.4 Performance Category 4: Information Technology Support (PWS 1.5.4)

None.

#### 2.3.5 All Software Tasks (PWS 1.5.5)

Team SDNC has the ability to perform a variety of software tasks to ensure the project is complete and delivered on time. We have extensive experience in the areas of software testing, configuration management, security, certification, and accreditation. We will identify all events as they pertain to the backlog item list at least once every 100 calendar days from award (i.e. Feature Complete, Code Complete, and Acceptance).

#### 2.3.5.1 Agile Programming Methodology

Team SDNC utilizes the Scrum methodology with slight modifications/improvements such as the inclusion of Sprint 0 and Sprint X. We currently implement a two (2) week iteration cycle. Our process is based on the Microsoft Scrum Template v1.0 for Visual Studio.

#### 2.3.5.2 Installer Code Writing

No changes from the BPA proposal.

#### 2.3.5.3 Software Testing

Assuming the availability of an experienced SQA Engineer, our team is fully prepared to provide any required level of software testing. We support and encourage integrated testing with the WEdge PMO as we believe this approach will result in a superior product. Our preferred process always includes functional testing, white box testing, and regression testing and our developers are very familiar with software development security best practices. We will load test all code to simulate large loads originating from several locations using available Virtual Machines (VMs) and test networks. Our extensive use of unit testing allows us to identify changes that adversely affect the proper functioning of code throughout all areas of an application. During the course of this Call Order, we will ensure that all code written by our team adheres to the requirement of 80 percent unit test code coverage. We make extensive use of HP Fortify to scan and identify possible vulnerabilities in our codebase.

#### 2.3.5.4 Software Security, Certification, and Accreditation

No changes from the BPA proposal.

#### 2.3.5.4.1 DoD Information Assurance Policies

No changes from the BPA proposal.

#### 2.3.5.4.2 Software Reviews and Scans

#### **2.3.5.4.2.1** Code Reviews

No changes from the BPA proposal.

#### **2.3.5.4.2.2** Fortify Scans

We have been using HP Fortify since it was adopted by the WEdge PMO. We require our developers to use it on a regular basis as well as implement full product scans at the end of each development iteration. We investigate all findings and correct or mitigate all Category 1 and Category 2 findings. Our future plans call for the integration of scans during the nightly build process.

In addition to our normal focus on writing secure code, our team uses static code analysis tools to identify possible vulnerabilities. This approach, combined with our extensive use of peer code reviews, will allow us to deliver safe and secure products to the customer. Fortify Scans will be conducted on all new and modified code.

#### 2.3.5.4.2.3 Software Vulnerability

No changes from the BPA proposal.

#### 2.3.5.4.2.4 Security Technical Implementation Guides (STIG) Reviews

All of our developers comply fully with the STIG review requirements and additionally utilize the knowledge gained from these reviews to identify and address any and all possible areas of concern early in the development process. This approach results in significant time savings and facilitates certification and accreditation of the software product.

#### 2.3.5.5 Software Development Qualifications

#### 2.3.5.5.1 Certified Ethical Hacker or Equivalent

No changes from the BPA proposal.

#### 2.3.5.6 Configuration Management

Team SDNC will be using the WEdge PMO Configuration Management Plan and will adhere and comply fully with this standard. All team members will review this document to ensure complete familiarity.

#### 2.3.6 All Tasks (PWS 1.5.6)

#### 2.3.6.1 Interaction with IITA

Our team members have been deeply involved in the WEdge Program and understand the criticality of ensuring the security of all software, especially the software programs like WEdge, designed specifically to support the Warfighter. Our team will work in partnership with the WEdge PMO IA/C&A personnel to ensure the integrity of the system, provide update reports as necessary, and presence at the weekly WEdge PMO status meeting.

In addition to attending the weekly WEdge PMO status meeting, we will provide regularly updated reports on the WEdge PMO SharePoint. Reports will include Sprint Burndown and Team Velocity as well as an updated project plan.

#### 2.3.6.2 Customer Interaction and Operational Support

Our team has worked extensively with WEdge customers over the past few years. Any and all customer interaction will be performed in a professional manner and fully documented for the WEdge PMO.

#### 2.3.6.3 Project Management

Our PM and Task Lead will work closely with both Lt. Col. Berry and the WEdge PMO throughout this project. Direct communication between Government staff and our team members on backlog technical issues and questions is highly encouraged.

#### 2.3.6.3.1 Program Management Plan

No changes from the BPA proposal.

#### 2.3.6.3.2 Metrics

Our metrics for this Call Order are detailed in Exhibit 1 and will be automated with Team Foundation Server (TFS), posted to the WEdge PMO SharePoint site, and reviewed at each PMR.

Call Order #4 Metrics	POC
Sprint Burndown Chart	Task Lead
The Sprint Burndown chart shows the progress and work accomplished on each specific task required to complete Product Backlog Items (PBI), which are identified during Sprint planning and needed to satisfy the project requirements. The data is extracted from TFS daily, posted within the team area for their information, and updated in the SharePoint IDE.	
2. Project Plan	Task Lead
The Project Plan is updated during Sprint 0 for the entire project, formally updated at the start of each Sprint, and updated within each Sprint as needed. Project progress is measured against the baseline, and the updated Project Plan is stored on the SharePoint IDE when a change is made.	
3. Team Velocity	Task Lead
Team Velocity is a measure of the number of PBIs completed by each developer during the Sprint cycle. It is a measure of developer productivity and is very useful in project and Sprint planning and scheduling for current and future efforts.	
4. Vulnerabilities Identified	Task Lead
Number of vulnerabilities, and the category of each, identified by software scans.	
5. Vulnerabilities Resolved	Task Lead
Number of vulnerabilities, by category, resolved - Goal is 100%.	
6. Defects Identified	Task Lead
Number of defects identified during SQA testing.	
7. Defects Resolved	Task Lead
Number of identified defects resolved - Goal is 100%.	
8. Unit Test Code Coverage	Task Lead
Number of lines of code unit tested divided by the number of lines of code written. Minimum requirement is 80% - Goal is 100%.	

Exhibit 1. Team SDNC Call Order 4 Metrics.

### 2.3.6.3.3 Integrated Digital Environment (IDE)

Meeting minutes, reports, metrics, and project documentation will be posted on the Government's SharePoint Site.

#### **2.3.6.3.4** Meetings

No changes from BPA proposal.

#### 2.3.6.3.5 Project Management Reviews (PMR), Status, and Technical Design Meetings

Required monthly PMRs (first Tuesday of each month at 10a.m.), and weekly status meetings (Tuesdays 10a.m.), deliverables D-5 and D-6 respectively, are included in our Deliverables Schedule to ensure each is conducted on time.

We will conduct technical design reviews, interim status meetings, and Scrum meetings with the developers, Information Technology (IT) professionals, and the customer; these can be scheduled as often as necessary. As part of our Scrum process, we have included a Sprint Results Demonstration and a Sprint Review in each sprint cycle of our project schedule.

#### 2.3.6.4 Restrictions on Development of Proprietary Material

Documentation, drawings, and information pertaining to the call order will be posted on the Government's SharePoint site.

#### 2.3.6.5 Data Accession List

No changes to the BPA proposal.

#### 2.3.6.6 Software Sustaining Support

No changes to the BPA proposal.

#### 2.3.6.7 Task Information

No changes to the BPA proposal.

#### 2.3.6.8 Security Requirements

All Team SDNC personnel proposed on this Call Order either currently possess an active Secret or higher security clearance, or will be sponsored for a Secret clearance in conjunction with this Call Order.

#### 2.3.6.9 Place of Performance

No changes to the BPA proposal.

#### 2.3.6.10 Travel

Team SDNC understands that travel is authorized up to \$10,000 per year for this Call Order. All travel conducted in our execution will be coordinated in advance with the CO/COTR, and will not exceed \$10,000 per year.

#### 2.3.6.11 Service Provider Purchases

No changes to the BPA proposal.

## 2.4 Deliverables and Acceptance Criteria (PWS 1.6)

Team SDNC has developed a Deliverables Schedule depicting our approach to accomplishing each requirement, as shown in Section 2.5.1. All deliverables, documentation, and plans, etc., will be accomplished using the Microsoft Windows 7 operating system, and editable by Microsoft Office products, unless otherwise specified by the Government. Team SDNC will provide a final CD/DVD with all final documentation, code, executable files, product updates, and other data developed during the course of this Call Order. Team SDNC follows service provider practices for all deliverables developed during the Agile SDLC.

#### 2.4.1 Deliverables for this PWS

Exhibit 2 depicts the deliverables for this Call Order and the POC responsible.

Delivery #	Deliverable	POC
D-1	<b>Functional Software Test Plan.</b> The Functional Software Test Plan is built from the Acceptance Criteria Objectives (ACOs), which address the acceptance criteria for each of the backlog items that are being implemented by Team SDNC. All of the test cases will be documented with the related backlog item. There will exist, at a minimum, one test case per backlog item. These items will be continually updated and reviewed during each PMR, with final results provided at code complete.	Task Lead
D-2	<b>Code Review Results.</b> The Team SDNC requirement is that 100% of the modified software is reviewed for compliance with the <u>IITA Software Development Standards</u> . The Software Development Lead monitors the Peer Code Reviews and ensures that all code reviews are documented in Microsoft Visual Studio. The results of the Code Reviews will be documented in a Memorandum of Record, indicating the completion of the reviews and made available to the customer for review on the last day of each code iteration cycle.	Task Lead
D-3	Code Scans. The Information Assurance Plan, updated in D-6, will be the basis for the Code Scans for Fortify and STIG compliance. All code scan findings and actions taken will be documented and included in the report. The STIGs will be followed, and the code is peer reviewed for compliance with security standards. Scans will be run at the completion of each Sprint and our Task Lead will ensure that zero critical or high findings exist. Any un-resolved findings or false positives will be fully documented and made available to the customer. Documentation will include a summary report describing our findings and actions taken on the last day of each code iteration cycle.	Task Lead
D-4	<b>Metrics.</b> Project metrics including Sprint Burndown, Velocity, and project progress reports will be published to the WEdge PMO SharePoint site and updated to reflect current status. Additional metrics concerning SQA activities will be made available to the customer if desired. Additionally, updates will be provided at each scheduled PMR.	Task Lead
D-5	<b>Program Management Review</b> . We will hold a regular PMR with the customer on the first Tuesday of each month at 10 a.m. to discuss program status. Slides for the PMR will be made available to the customer at least one day in advance of the meeting. During the PMR, we will describe the current status of our team and the project as a whole, including present cost, identified risks, metrics and schedule updates. This review also provides an opportunity for the customer to ask questions and acquire clarifications. The agenda will be delivered by 10 a.m. the day before the meeting.	CPA Program Manager
D-6	<b>Status Meeting.</b> We will hold weekly status meetings on Tuesday mornings at 10 a.m., when no PMR is scheduled, with the PMO to discuss project status. An agenda will be provided to the customer at least one day in advance and meeting minutes will be published to the PMO SharePoint site and delivered to all attendees via email by COB the following day. The agenda will be delivered at least two (2) hours before the meeting. At a minimum, current task status and outstanding issues with remediation plans will be covered during this meeting.	Task Lead
D-7	<b>Unit Test Coverage.</b> The Task Lead monitors the Unit Test Code Coverage through the use of Visual Studio tools. The contract requirement is that 80% of the testable, developed code be covered by unit tests. The IITA Software Development Standards recognizes that not all developed code can be unit tested, but what can be tested will be tested. Any nontestable code will be fully documented and justified to the customer's satisfaction. The Unit Tests are contained in Microsoft Visual Studio and a Code Coverage Report will be provided at code complete and updated during each scheduled PMR.	Task Lead
D-8	<b>Project Plan.</b> A project plan will be created during Sprint 0, utilizing MS Project. This document will be, at a minimum, formally updated at the start of each iteration cycle and made available to the customer on the PMO SharePoint site. Project tasks will be at the backlog item level and will cover all current backlog items and future items at a feature level.	Task Lead

Delivery #	Deliverable	POC
D-9	Capabilities Briefing and Demonstration. We will hold a product demonstration at the end of each development iteration. The demonstration will be recorded and published to the WEdge PMO SharePoint site. This demonstration will involve the customer and include at least 70% of planned features with no more than one unhandled exception. The purpose of these demonstrations is to allow the customer to review our progress as well as request changes or modifications to the product as it is being developed. Any changes requested by the customer will be reviewed by the Task Lead to ascertain the effort involved. The customer will then be provided the opportunity to decide if the changes should be implemented as part of the current call order, or deferred to a future tasking.	Task Lead
D-10	Requirements Traceability Matrix (RTM). Team SDNC's RTM follows the IEEE standard currently used at IITA. Each requirement is cross referenced, showing:  Where the requirement is located in the customer documents  Where the requirement is located in the SRS  The test case in the Test Plan that addresses the requirement  Results of testing  Where the requirement is implemented in the code  The PBI that implemented the requirement  Any modifications that occurred to the requirement during the project  All requirements are documented in the RTM. This document will be updated, at a minimum, at the end of each development iteration and a final version will be delivered at code completion.	Task Lead (as much as possible, depending on whether optional SQA is exercised)
D-11	<b>STIG Review.</b> STIG Reviews will be completed prior to the start of coding activities, as well as annually, and documentation certifying our compliance will be provided to the customer during Sprint 0.	Task Lead
D12	<b>Information Assurance Plan Updates.</b> We will work with the WEdge PMO IAM, to create an IA Plan which will summarize IA information relating to this project. Information provided will include all affected IA Controls, our team's STIG compliance, and any other applicable information. The purpose of the plan is to document that no CAT 1 items are missing and that no CAT 1 findings exist. This plan will be provided to the customer during the first PMR, and updates will be provided at all subsequent PMR's.	Task Lead
D-13	<b>Ports, Protocols, and Services (PPS) Worksheet.</b> We will provide the customer with a completed ports and protocols worksheet, which identifies all ports and protocols utilized by an application, for use in the certification and accreditation process at code completion.	Task Lead
D-14	<b>Database Schema.</b> A complete Entity Relationship Diagram (ERD) documenting the database design will be provided as part of the System Design Document, delivered at code completion.	Task Lead
D-15	<b>Data Accession List.</b> We will provide a data accession list to the customer at the first PMR with any updates provided at subsequent PMR's. The list will be in accordance with section 1.5.6.5 of the BPA.	Task Lead
D-16	<b>Trip Report.</b> We will provide a detailed trip report for any travel incurred during the performance of this contract. The report will include a daily summary of activities, contacts made, and any opportunities that were discovered. This report will be delivered no later than 48 hours following our return from the travel, unless approved by the WEdge PMO.	Traveler
D-17	<b>Technical Software Design Document (SDD) and Reviews.</b> We will author a Software Design Document which details our approach to the development tasks. Information included in the document includes high-level architecture, interface definitions, database schemas, UI description, etc. This document will be made available to the customer for review, and will be updated during PMR's and by final code acceptance. Note this is a "living" document and will be updated as an application's design matures over time.	Task Lead

Delivery #	Deliverable	POC
D-18	<b>Software Requirements Specification (SRS).</b> A Software Requirements Specification will be created or updated throughout the development lifecycle. All requirements will be addressed in the SRS and any requirements that are updated or changed during development iterations will be promptly updated in the SRS. An initial SRS will be delivered within 30 calendar days of award and updates will be presented at each PMR. Note this is a "living" document and will be updated as an applications design matures over time.	Task Lead
D-19	<b>Software Version Description (SVD).</b> A Software Version Description document will be provided, per the format of DID DIIPSC-81442A. The SVD will thoroughly describe the contents of each project, provide release notes and known bugs. This document will be provided at code acceptance, or at a minimum, each quarter.	Task Lead
D-20	<b>Installation Guide.</b> Our Technical Writer will create a professional installation manual which will be provided to the customer at code acceptance.	Technical Writer
D-21	<b>PowerPoint Technical Design Briefing.</b> A capabilities briefing will be created using MS PowerPoint, describing the software solution at a technical level. It will be of sufficient detail to allow a software engineer to fully understand the application architecture and cover, at a minimum, 75% of the specified requirements. This document will be provided at code acceptance, or at a minimum, each quarter.	Task Lead
D-22	<b>PowerPoint System Briefing.</b> An operational briefing will be created using MS PowerPoint, describing the system from an operational (aircrew) perspective. This briefing will detail user interaction and operation of the system in a manner suitable for use in enduser training sessions. This document will be provided at code acceptance, or at a minimum, each quarter.	Task Lead
D-23	<b>Architectural DODAF Diagrams.</b> DODAF OV-1 and SV-1 diagrams will be created in accordance with DODAF v2.02 standards. This document will be provided at feature complete or at a minimum, each quarter.	Task Lead
D-24	<b>White Paper.</b> Our Technical Writer will create a one (1) page White Paper, describing the product at a high-level and in a form suitable for use on the WEdge website, or as a marketing-style handout. This document will be provided at feature complete or, at a minimum, each quarter.	Technical Writer
D-25	<b>Complete User's Guide.</b> Our Technical Writer will create a professional quality User's Guide or update existing documents as necessary. This document will detail the use of the system at a level appropriate for the intended user. The document can be included as an online reference within the final product; and will be available to the customer throughout the project. This document will be provided at code acceptance, or at a minimum, each quarter.	Technical Writer
D-26	<b>Short 1-Page Quick Reference User Guide.</b> Our Technical Writer will create a brief pocket guide comprised of the common use details of the product. This document will be	Technical Writer
	provided at feature complete or, at a minimum, each quarter.	
	Optional SQA Deliverables	
DQ-1	Full Software Test Plan with Results. The Team SDNC Test Report will be produced from the results of the Test Plan. The SQA standard is that the Test Report is updated at the end of each Sprint, with the final delivery being made when the project is complete. The reports will include the integration, load checking, error checking, and validity checking required.  Team SDNC's standard is that 100% of all test criteria must be met before a requirement can be accepted. All accepted requirements will be documented in the report, as well as any discrepancies discovered in testing.  These documents will be continually updated, presented at each PMR, and with final results at acceptance.	SQA Engineer

Delivery #	Deliverable	POC
DQ-2	Requirements Traceability Matrix (RTM). Team SDNC's RTM follows the IEEE standard currently used at IITA. Each requirement is cross referenced and shows:  Where the requirement is located in the customer documents  Where the requirement is located in the SRS  The test case in the Test Plan that addresses the requirement  Results of testing  Where the requirement is implemented in the code  The PBI that implemented the requirement  Any modifications that occurred to the requirement during the project  All requirements are documented in the RTM. This document will be continuously updated, reviewed at each PMR, and delivered at code acceptance. This document is similar to D-10, but is much more detailed.	SQA Engineer

Exhibit 2. USAFA WEdge Call Order 4 Deliverables. Team SDNC assigns specific responsible POCs for each deliverable.

#### 2.4.2 Deliverables Schedule

Given the nature of the work involved in resolving identified software deficiencies, it is not feasible to develop a traditional milestone driven schedule for this call order. We have developed the schedule of deliverables. Overall deliverables for this Call Order are driven either by the calendar (i.e. regularly scheduled PMRs and Status Meetings) or development cycle events (i.e. deliverables associated with feature completion, code completion, etc.).

We expect to work the current identified issues in priority order, but we understand that priorities may shift based on the needs of the end user. Our approach is to work hand-in-hand with the Government COTR/Program Manager to identify the task or tasks that need work most urgently, and then will develop the project schedule to address the set of requirements.

In the development cycle these tasks define the "feature", which drives the deliverables associated with Feature Completion, Code Completion, and Acceptance. Throughout this call order we will use our standard two (2) week Agile Sprint cycle. The project schedule, Exhibit 3, identifies the duration of Sprint 0 and Sprint X for the Feature.

Calendar Driven Deliverables							
Status Meeting (weekly Tuesdays at 10:00 a.m.)	<ul> <li>Agenda due two (2) hours prior to meeting</li> </ul>						
(D6)							
PMR (First Tuesday of each month 10:00 a.m.)	<ul> <li>Functional software test plan (D1)</li> </ul>						
(D5)	Code scans (D3)						
	Metrics (D4)						
	<ul><li>Unit test coverage (D7)</li></ul>						
	<ul> <li>IA Plan and updates (D12)</li> </ul>						
	<ul> <li>Tech software Design Doc (D17)</li> </ul>						
	<ul> <li>SRS (D18)(Initial submission within 30 days of award)</li> </ul>						
	• Full Software Test Plan with Results (DQ1)(If CLIN 4						
	exercised)						
	■ RTM (DQ2) (if CLIN 4 exercised)						
End of each contract year	<ul> <li>Data Accession List (D15)</li> </ul>						

Event Driven Deliverables						
Before Starting Any Development	STIG Review (D11)					
and annually thereafter						
Start of Code Cycle	<ul><li>Project Plan Update (D8)</li></ul>					
Last Day of Code Cycle	<ul> <li>Code review results (D2)</li> </ul>					
	<ul> <li>Capabilities Briefing and Demo (D9)</li> </ul>					
	■ RTM (D10)					
Feature Complete (At least every 100 days)	<ul> <li>DoDAF Diagrams (D23)</li> </ul>					
	■ White Paper (D24)					
	<ul> <li>Quick Reference Users Guide (D26)</li> </ul>					
Code Complete (At least every 100 days)	<ul> <li>Functional Software Test Plan (final results) (D1)</li> </ul>					
	<ul> <li>Code Review Results (final results)(D2)</li> </ul>					
	Code Scans (D3)					
	<ul> <li>Unit Test Coverage (final report) (D7)</li> </ul>					
	<ul><li>PPS Work Sheet (D13)</li></ul>					
	<ul> <li>Data base schema (D14)</li> </ul>					
	■ RTM (finalized)(D10)					
Acceptance (at least every 100 days)	<ul> <li>Capabilities Briefing and Demo (D9)</li> </ul>					
	<ul> <li>Tech software Design Doc (D17)</li> </ul>					
	• SRS (D18)					
	■ SVD (D19)					
	■ Installation Guide (D20)					
	<ul> <li>Power Point Tech Design Brief (D21)</li> </ul>					
	<ul> <li>Power Point System Brief (D22)</li> </ul>					
	■ Complete Users Guide (D25)					
	• Full Software Test Plan with Results (DQ1) (If CLIN 4					
	exercised)					
	RTM (DQ2) (if CLIN 4 is exercised)					
Trip Reports (As Required)	<ul> <li>Trip report completed within 48 hours travel end (D16)</li> </ul>					

Exhibit 3. Team SDNC Project Schedule and Milestones.

### 2.4.3 Closing Call Order 4

After all interim milestones have been accomplished and all deliverables accepted, the Team SDNC Call Order Project Manager conducts a final review of all Call Order requirements; first with the Team SDNC PM, and then with the IITA PM or designated POC, to validate all requirements have been satisfied. After technical "sign off" on all Call Order requirements, the PM and Team SDNC will work with the CO to formally close the Call Order and submit final invoices.

# 3. Call Order Pricing (RFQ 1.1 and 5.1c, PWS 1.5.3)

# 3.1 Performance Category 3: Software Maintenance and Modification (RFQ 1.1 and 5.1c, PWS 1.5.3)

Exhibit 4 details Team SDNC Call Order #4 pricing.

Item No.	Description	QTY	Unit	U	nit Price		Amount
0001	Software Maintenance	12.00	МО	\$	63,893	\$	<b>7</b> 66,710
							Ï
0002	Documentation Support	12.00	MO	\$	5,323	\$	63,873
0003	Supplementary Capability				NTE	\$	390,000
0004	Software Quality Assurance Support	1,880.00	HR		NTE	\$	150,611
0005	Travel				NTE	\$	10,000
0006	Other Direct Costs (ODC) *					\$	55,329
	* The Cost for Optional CLIN 0004 ODCs (\$	8,499) is include	d in this	total p	rice		
OPTION							
1001	Software Maintenance	12.00	MO	\$	63,893	\$	766,710
OPTION							
	Documentation Support	12.00	MO	\$	5,323	\$	63,873
OPTION							
	Supplementary Capability				NTE	\$	390,000
OPTION							
	Software Quality Assurance Support	1,880.00	HR		NTE	\$	150,611
OPTION							
1005	Travel				NTE	\$	10,000
OPTION							
1006	Other Direct Costs (ODC)		<b>*</b>			\$	7
Nert State November 2000 ris 160							
OPTION	500 AV 88 P 8	STATE PART			Volleti Productive	150	vice development of
	Software Maintenance	12.00	MO	\$	63,893	\$	766,710
OPTION		gage gran					ge wee
2002	Documentation Support	12.00	MO	\$	5,323	\$	63,873
OPTION				-	3.70072	ď.	200.000
4.000.00.000.00	Supplementary Capability			-	NTE	\$	390,000
OPTION	G G O L'A A G	1.000.00	TT	-	3.7007	of the second	150 611
2004	Software Quality Assurance Support	1,880.00	HR	-	NTE	\$	150,611
OPTION	T1				NTTT	ď	10.000
2005	Travel				NTE	\$	10,000
OPTION	Other Direct Costs (ODC)	_				¢	
2006	Other Direct Costs (ODC)					\$	-

Item No.	Description	QTY	Unit	Uı	Unit Price		Amount
OPTION							
3001	Software Maintenance	12.00	МО	\$	63,893	\$	766,710
OPTION							
3002	Documentation Support	12.00	MO	\$	5,323	\$	63,873
OPTION							
3003	Supplementary Capability				NTE	\$	390,000
OPTION							
3004	Software Quality Assurance Support	1,880.00	HR		NTE	\$	150,611
OPTION							
3005	Travel				NTE	\$	10,000
OPTION							
3006	Other Direct Costs (ODC)					\$	3

Our pricing is based on approved 2011 Schedule 70 rates. We are holding these rates at the current level for the base year. For the option years, we will provide updated rates on an annual basis that reflect the GSA approved uplift based on Bureau of Labor Statistics Economic Cost Index data.

Exhibit 4. Team SDNC Proposed Price and Cost Schedule. USAFA receives outstanding services by experienced Team SDNC personnel.

### 3.1.1 Contractor Performance Assessment Reporting System (RFQ 4.0)

Team SDNC's Contractor Performance Assessment Reporting System point of contact (POC) is:

Mr. Martin Payne 384 Inverness Parkway, Suite 211 Englewood, CO 80112 martin.payne@softecinc.com

# 3.2 Contractor Provided Hardware, Software, and Licensure (PWS 2.2 – 2.3)

Team SDNC included specific hardware for Other Direct Costs (ODC) in our overall pricing to support CLIN X006 in Exhibit 4 above. In accordance with PWS Section 2.2 and 2.3, Team SDNC will provide the following hardware, software, and software licenses:

- Five high end mobile workstations and Visual Studio licenses capable of supporting software development and testing
- One mobile workstation to support the Documentation Specialist
- One high end mobile workstation and Visual Studio license to support testing and quality for the SQA (Optional CLIN 0004)

Note: A mobile workstation includes: laptop, docking station, dual monitors, and operating software.

# 3.3 Exhibit 1 – Pricing for Supplemental Capabilities Pricing (PWS 3.3)

Exhibit 5 depicts the Team SDNC labor categories, GSA Schedule Ceiling Rates, Discounted Labor Rates (fixed hourly rate – normal) and Discounted Overtime Labor Rates (fixed hourly rate – overtime) available to support CLIN X003 Supplemental Capability.

Contractor Name: Softec GSA Schedule No: GS-35F-0036P									
Performance Period Y	ear: Bas	e Year March 201	2 - March 201	3					
Labor Category Description		GSA Schedule Ceiling Rate	MDR (Minimum Discount Rate)	Resulted Discounted Labor Rate	Resulted Discounted Overtime Labor Rate				
Project Manager I	9	65.25	1.00%	\$ 64.60	\$ 64.60				
Project Manager III	9	5 119.23	10.06%	\$ 107.24	\$ 107.24				
Functional Specialist II	9	5 100.08	8.56%	\$ 91.52	\$ 91.52				
IT Specialist I	9	60.39	1.00%	\$ 59.79	\$ 59.79				
IT Specialist II	9	62.18	1.00%	\$ 61.56	\$ 61.56				
Database Management Specialist I	9	65.73	9.04%	\$ 59.79	\$ 59.79				
Database Administrator I	9	5 109.28	4.52%	\$ 104.34	\$ 104.34				
Database Administrator III	9	5 153.81	5.69%	\$ 145.05	\$ 145.05				
Systems Engineer I	9	5 70.78	3.92%	\$ 68.01	\$ 68.01				
Network Designer/Architect	9	5 126.27	1.00%	\$ 125.01	\$ 125.01				
LAN/WAN Specialist I	9	S 44.01	4.63%	\$ 41.97	\$ 41.97				
LAN/WAN Specialist II	9	61.32	7.93%	\$ 56.46	\$ 56.46				
LAN/WAN Specialist III	9	62.47	2.35%	\$ 61.00	\$ 61.00				
LAN/WAN Specialist IV	9	73.63	4.21%	\$ 70.53	\$ 70.53				
LAN/WAN Specialist VI	9	84.62	6.02%	\$ 79.53	\$ 79.53				
Senior Programmer/Analyst I	9		6.58%	\$ 91.03	\$ 91.03				
Junior Programmer/Analyst I	9	S 28.86	1.00%	\$ 28.57	\$ 28.57				
Senior Systems Programmer/Analyst I	9	82.27	0.56%		\$ 81.81				
Senior Systems Programmer/Analyst II	9	99.07	1.00%	\$ 98.08	\$ 98.08				
Quality Assurance Specialist I	9	5 70.28	3.22%	\$ 68.01	\$ 68.01				
Documentation Specialist I	9	6 42.88	1.00%	\$ 42.45	\$ 42.45				
Help Desk Specialist I	9	30.68	1.27%	\$ 30.29	\$ 30.29				
Help Desk Specialist II	9	34.80	1.00%	\$ 34.45	\$ 34.45				
Help Desk Specialist III	9	S 44.49	7.21%	\$ 41.28	\$ 41.28				
Help Desk Specialist IV	9	48.00	1.00%	\$ 47.52	\$ 47.52				
Configuration Management Specialist	9	8 48.10	1.00%	\$ 47.62	\$ 47.62				
Computer Graphics Specialist I	9	38.65	1.00%	\$ 38.26	\$ 38.26				
Technical Documentation Specialist	9		1.00%		\$ 46.23				
Network Engineer I	9	S 49.10	1.00%	\$ 48.61	\$ 48.61				
Network Engineer III	9	57.05	1.00%		\$ 56.48				
Network Administrator II	9	5 70.28	4.62%		\$ 67.03				
Senior Financial Analyst	9	S 44.90	1.00%	\$ 44.45	\$ 44.45				
Senior Systems Architect I	9		1.89%		\$ 86.16				
Quality Assurance Manager	9		1.00%		\$ 104.82				
Computer Systems Analyst III	9		1.00%		\$ 51.27				
Computer Systems Analyst IV	9	57.77	1.00%		\$ 57.19				
Computer Systems Analyst VII	9		1.00%		\$ 71.48				
Database Management Analyst	9		1.00%		\$ 112.66				
Oracle Applications Administrator	9		1.00%		\$ 129.42				
Oracle Applications Database Administ		\	1.00%		\$ 151.69				
Oracle Applications Functional Special			1.00%		\$ 153.70				

Contractor Name: DdevelopersDen	GSA Schedule No: GS-35F-0532X						
Labor Category Description		A Schedule iling Rate	MDR (Minimum Discount Rate)	Resulted Discounted		Dis Or	esulted counted vertime oor Rate
Applications Programmer I	\$	57.27	0.00%	\$	57.27	\$	57.27
Applications Programmer II	\$	74.05	0.00%	\$	74.05	\$	74.05
Applications Programmer III	\$	88.32	0.00%	\$	88.32	\$	88.32
Software Development Lead	\$	93.25	0.00%	\$	93.25	\$	93.25
Systems Architect	\$	98.74	0.00%	\$	98.74	\$	98.74
Network Engineer I	\$	55.49	0.00%	\$	55.49	\$	55.49
Technical Writer I	\$	74.05	0.00%	\$	74.05	\$	74.05
Project Manager I	\$	93.80	0.00%	\$	93.80	\$	93.80
Configuration Management Specialist I	\$	74.05	0.00%	\$	74.05	\$	74.05
SQA Engineer II	\$	88.32	0.00%	\$	88.32	\$	88.32

Contractor Name: NTConcepts	NS.		8-35F-0543R										
Labor Category Description		Labor Category Description		Labor Category Description		Labor Category Description		SA Schedule eiling Rate	MDR (Minimum Discount Rate)		Resulted Discounted Labor Rate	Di O	esulted scounted vertime bor Rate
Program Manager	\$	166.36	24.47%	\$	125.65	\$	125.65						
Project Manager	\$	93.58	24.47%	\$	70.68	\$	70.68						
Senior Programmer	\$	124.77	24.47%	\$	94.24	\$	94.24						
Programmer Level 2	\$	103.97	24.47%	\$	78.53	\$	78.53						
Programmer Level 1	\$	70.70	24.47%	\$	53.40	\$	53.40						
Senior Software Architect	\$	174.68	24.47%	\$	131.94	\$	131.94						
Software Architect	\$	140.36	24.47%	\$	106.01	\$	106.01						
Senior Network Engineer	\$	150.76	24.47%	\$	113.87	\$	113.87						
Help Desk Support Services Specialist	\$	68.63	24.47%	\$	51.84	\$	51.84						
Senior Graphics Designer	\$	84.22	24.47%	\$	63.61	\$	63.61						
Quality Assurance Specialist	\$	71.74	24.47%	\$	54.19	\$	54.19						
Administrative Specialist	\$	43.67	24.47%	\$	32.98	\$	32.98						

Our pricing is based on approved 2011 Schedule 70 rates. We are holding these rates at the current level for the base year. For the option years, we will provide updated rates on an annual basis that reflect the GSA approved uplift based on Bureau of Labor Statistics Economic Cost Index data.

Exhibit 5. Category 3: Software Maintenance and Modification, Rates. IITA receives additional discounts off Minimum Discounted Rates (MDR) from the BPA.

# **Appendix A – Resumes**

# 1. Task Lead / System Architect / TFS Subject Matter Expert - Patrick Speer

#### **EDUCATION AND CERTIFICATIONS:**

- B.S., Physics, The Ohio State University, 1989 1994
- Microsoft Certified Trainer (MCT)
- Microsoft Certified Systems Engineer (MCSE)
- Microsoft Certified Solutions Developer (MCSD.NET)
- Microsoft Certified Database Administrator (MCDBA)
- Sun Certified Programmer for the Java 2 Platform
- Microsoft Certified Professional Developer: Enterprise Applications (MCPD: Enterprise)

**2007 – Present** 

#### **RECENT PROFESSIONAL EXPERIENCE:**

developersDen

Warfighter's Edge (WEdge) - USAF Academy

### Project Lead/Architect for the WEdge Viewer Lite Project

- Project Management including project planning, Scrum, and PMR's
- Utilize TFS2010 to document and track the development process
- Create TFS automated builds for development projects
- Create and publish TFS reports (Sprint Burndown, Team Velocity, etc)
- Software Architecture tasks including design documents and DoDAF artifacts
- Provided technical and design direction for the development team
- Software Development including Fortifying code scans and Information Assurance support

#### Project Lead/Architect for the WEdge Shuttle Enhancements Project

- Project Management including project planning, Scrum, and PMR's
- Utilize TFS2010 to document and track the development process
- Create TFS automated builds for development projects
- Create and publish TFS reports (Sprint Burndown, Team Velocity, etc)
- Software Architecture tasks including design documents and DoDAF artifacts
- Provided technical and design direction for the development team
- Software Development tasks including Fortify code scans and IA support

#### Project Lead/Architect for the Point Analysis Tool (PAT) Project

- Project Management including project planning, Scrum, and PMR's
- Utilize TFS2010 to document and track the development process
- Create TFS automated builds for development projects
- Create and publish TFS reports (Sprint Burndown, Team Velocity, etc.)
- Software Architecture tasks including design documents and DoDAF artifacts
- Provided technical and design direction for the development team
- Software Development tasks including Fortify code scans and IA support

#### Project Lead/Architect for the Mission Planning Route Translator (MPRT)

- Project Management including project planning, Scrum, and PMR's
- Utilize TFS2010 to document and track the development process
- Create TFS automated builds for development projects
- Create and publish TFS reports (Sprint Burndown, Team Velocity, etc.)

# GSA Project Number ID08120040 WEdge Software Maintenance at United States Air Force Academy

- Software Architecture tasks including design documents and DoDAF artifacts
- Provided technical and design direction for the development team
- Software Development tasks including Fortify code scans and IA support

#### Project Lead/Architect for the Aeronautical Advisory and NOTAM Tool (AANT)

- System requirements analysis
- Utilize TFS2010 to document and track the development process
- Programming (C# .NET, WCF Web Services)
- Provided technical and design direction for the development team

#### Senior Developer/Architect for the WEdge Briefing Software (WEBS) Project

- System requirements analysis and specialized tools (e.g., Team Foundation Server (TFS))
- Utilize TFS2005/2008 to document and track the development process
- SOA architecture and design
- Developed the business and data layer for document export/import
- Developed the business and data layer for messages sent between client and server tiers to track system issues and usage
- Developed SSRS 2005 client-side reporting solution for system issues and usage
- Designed and implemented SQL Server 2005/2008 database for server tiers
- Provided technical and design direction for the development team
- Programming (VB.NET, PowerPoint VSTO add-in, WCF Web Services)

# 2. Development Lead/WEF SME - Chad Mello

#### **EDUCATION AND CERTIFICATIONS:**

- PhD in progress, UCCS, UC Denver, and UC Anschutz School of Medicine, 2010 Present
- M.S. in progress, Computer Science, University of Colorado, 2010 Present
- B.S., Computer Science, College of Santa Fe, 2004 2009
  - Additional Studies: Computer Science, University of Rhode Island, 2002 2004
- A.S., Computer Science, Community College of RI, 1996 1999

#### **PROFESSIONAL EXPERIENCE:**

developersDen

**2011 – Present** 

#### Warfighter's Edge (WEdge) - USAF Academy

#### Senior Analyst and Project/Tech Lead for the United States Air Force

- WEdge products development and improvements
- Development Lead for REST-based Shuttle web service for publishing buckets, uploading and modifying content, and viewing modified buckets through RSS feeds
- WEF/MEF/SDK and Visual Studio expert
- WEdge Viewer Lite development
- WEdge Shuttle enhancements
- Development Lead for the Mission Planning Route Translator
- Development and design for the Point Analysis Tool (PAT) Project
- WEdge Injector application development
- WEF enhancements
- WEdgeNET support
- WEdge Master Polling modifications and enhancements

#### **Intelligent Software Solutions**

2009 - 2011

#### Senior Analyst and Project/Tech Lead for the United States Air Force

- Product lead for critically utilized software client designed for the Air Force and Warfighter planning. This software is designed to help exact strikes and training, thereby ensuring successful missions with maximum enemy kills whilst reducing personnel and civilian casualties.
- Technical lead and designer for total revamp of core infrastructure and product framework for Warfighter planning/mission system.
- Proven skills and experience in both theoretical and applied software framework design. Able to express and demonstrate a solid design proposal upon which to build the next generation of the product going forward; this design proposal was accepted, and is currently being implemented.
- Geospatial technology integration experience using custom Web services, .NET, WCF, and embedded globe clients such as Google Earth.

#### **Digital Science West**

**2004 – Present** 

#### Freelance Software Engineer & Developer, various clients include the United States Air Force

- Full software development cycle support this includes:
- Utilizing off-the-shelf software utilities for gathering requirements
- Project planning & management tools to establish project goals and timelines
- Modeling software to help establish framework, databases, and structures
- Source code repositories for safe keeping and backups
- Unit testing procedures, and beta tracking procedures
- Support-tracking software for addressing feature requests and bug fixes

- Note: The most recent projects (since 2004) have been developed within a managed environment. This means that *project planning and tracking software*, *source code repositories*, *modeling software*, *and off-the-shelf project management tools* were utilized to help secure successful, timely software completion and delivery. These tools varied from project to project. *Demonstrated ability to adjust to, and utilize, any preferred development tools for each project*.
- Worked heavily with Microsoft .NET 2.0 & 3.5 as well as 4.0 platforms, languages and tools C# and VB.NET in VS 2005, VS 2008, and VS 2010 environments. Additionally, experienced in WinForms, ADO.NET, WPF, WCF, Windows API (95, 98, 2000, XP, CE), FoxPro, VC++, COM, Jet, and SQL Server 2000, 2005, and 2008, storage procedures; also, latest inter/intranet development with ASP.NET 2.0, 3.5 & 4.0, Community Server, .Net remoting, Web classes, Web forms, Ajax and JavaScript.
- Technical and Project lead for the United States Air Force developing framework and logistical engine for High-profile Warfighter's critical mission planning and briefing software, WEdge (Warfighter's Edge).
- A total product re-write based on highly interactive WPF User interfaces, C#, .NET 3.5, VS 2008, COM interoperability, C++, and VB.NET.
- Completed customized financial advisory website based on Community Server 2008.5, .NET
   2 & 3.5, Visual Studio 2008, SQL Server 2005. Was the main software developer on this WEdge tasks.
- Completed several Web site projects based on Community Server 2007 & 2008 sites based heavily on ASP.NET & C#; also involved with producing custom Web controls, JavaScript, SQL Server 2005 & stored procedures, and styling with CSS. This project was very large and required the combined effort of several teams in multiple countries.
- Produced the company's Web site (www.digisciwest.com) using ASP.NET with Ajax extensions simple but effective.
- Enterprise store management suite that enables items, item pricing, and sales changes to be pushed and pulled to and from multiple stores in various regions and chains. This suite helps corporations to manage multi-store information from one location. Based on ASP.NET 2.0, C#, VB.NET, and SQL Server 2005.
- Windows CE-based hand held inventory software application for scanning and reconciling inventory items using various wireless ARMS and MIPS machines. Based on .NET compact framework, C# using TCP, and VB (TCP server built using VB6).
- Designed, developed, and implemented highly complex, rule-driven frequent diner/customer loyalty system based 100% on .NET (C#) and SQL Server 2000. Plugs into Point of Sale systems used in hospitality industry.
- Developed Windows Purchase order and Inventory System: Available as a smart client application as well as and Intranet-based system on ASP.NET 1.1.
- Developed a sophisticated Windows Chemical Mixture System used to mix and monitor chemical usage, adjustments and cost.
- Developed a Windows digital imaging and cataloging system. Automated image capturing and image manipulation, produced printed, custom catalogs for customers as well as exported HTML Web pages for their online catalog system (including thumbnail images).
- Developed automated Windows software to collect and process data from various PLCs attached to complex machinery. The resultant critical reports and graphs were used to report to EPA and other Government agencies and therefore had to be accurate.

#### **Restaurant Data Concepts**

1997 - 2004

#### Software Analyst/Developer/Project Leader

 Designed and developed an entire distributed framework for our product's Back Office software using Visual Basic 6.0, VC++, and VB.Net. All aspects from GUI (presentation layer) to middle tier and on through to the backend database is based on COM/DCOM and

- also utilizes ActiveX, HTML, DHTML, OLEDB, ADO, MSDE, SQL Server-7, IE5, and XML to provide a very scalable, flexible, and cohesive product. Also, an ASP.NET frontend was added to provide an intranet-based "desktop" built from the same object model.
- Designed and developed very functional and sophisticated labor scheduling system as part of the new back office product. Allows for drag & drop time bars, forecasting, labor templates, labor availability, etc. (currently converting to ASP.NET application).
- Designed an information routing system that directs documents, XML, and other sorts of data through a COM-based infrastructure to its proper destination.
- Introduced the company to proper documentation and software development techniques and to such technologies as Relational databases, Direct-X, OLEDB, Inter/Intranet, XML, COM/DCOM, RAS, Source Safe, Object Based Development and radical code reuse beyond that of any RAD environment when used alone.
- As a direct result of my team's efforts and resolution to utilize modern technologies to our advantage, the company has restructured much of its product to meet new standards.
- Reviewed resumes/interviewed potential individuals for programming positions within RDC.

#### **KYRAN Research & Associates**

**1996 - 1997** 

#### Software Developer/Analyst

- Played a major role in developing a huge distributed system based on MS SQL Server for the Massachusetts Department of Public Health for child immunization tracking and predicting. This project had lasted for almost the entire year that I worked for this company. It was quite extensive and involved an extremely complex data synchronization mechanism that was written from scratch.
- Developed an entirely new COM object system for direct ODBC manipulation.
- Developed a RPC mechanism for use on SUN operating system so as to communicate between SUN and Windows systems.
- More projects can be listed upon request.

#### **Providence Metallizing, Inc.**

**1992 – 1996** 

#### Programmer

- Helped to develop complex order entry, customer pricing, and order distribution system for WANG VS 5000 in COBOL.
- Developed Windows software (based on VB2 and VB3) to import information from WANG to expand our system's capabilities to the PCs within our company.
- Acquired proper database and software design skills as well as keen systems analysis skills.
- Designed many VB programs that performed various tasks throughout manufacturing plant as well as interfaced with Programmable Logic Cards for controlling Machines and their cycles.

# 3. Senior Developer - Daniela Trapani

#### **EDUCATION AND CERTIFICATIONS:**

- B.S., Aeronautical Engineering, The Ohio State University, 1984 1989
- Microsoft Certified Trainer (MCT)
- Microsoft Certified Application Developer (MCAD.NET)
- Microsoft Certified Solutions Developer (MCSD.NET)
- Microsoft Certified Professional Developer: Enterprise Applications (MCPD: Enterprise)
- Certified Technical Trainer (CTT)

#### **RECENT PROFESSIONAL EXPERIENCE:**

developersDen

Warfighter's Edge (WEdge) - USAF Academy

**2007 – Present** 

#### Senior Developer for the WEdge Shuttle Enhancements Project

- Modified code to disconnect UI from FalconView
- Modified UI code to interact successfully in a disconnected environment
- Unit Tests
- Programming (VB.NET, WCF Web Services, SQL Server 2008)

#### Senior Developer for the WEdge Viewer Lite Project

- Updated UI to incorporate Viewer Lite capabilities
- Unit Tests
- Programming (C# .NET, WCF Web Services)

#### Senior Developer for the Point Analysis Tool (PAT) Project

- Created PFPS plug-in communication architecture
- Designed and developed plug-in UI
- Designed and developed storage mechanism for User preferences
- Unit Tests
- Programming (C# .NET, FalconView, SDK)

#### Senior Developer for the Mission Planning Route Translator (MPRT)

- Modified Windows UI for a more User-friendly experience
- Updated code to determine which importers/exporters are supported
- Created JMPS component for collaboration between standalone application and JMPS
- Created PFPS exporter class used to connect to PFPS route server for route translation
- Programming (C# .NET, JMPS, SDK)

#### Senior Developer for the Aeronautical Advisory and NOTAM Tool (AANT) Project

- Created PFPS plug-in communication architecture
- Designed and developed plug-in UI
- Designed and developed storage mechanism for User preferences
- Programming (C# .NET, FalconView API)

#### Senior Developer for the WEdge Briefing Software (WEBS) Project

- Developed security infrastructure for client UI (Tier 3)
- Helped develop client UI communication capabilities
- Helped develop file subscription communication between client UI and SQL Server
- Programming (VB.NET, PowerPoint VSTO add-in, WCF Web Services)

# 4. Senior Developer - Terry Torres

#### **EDUCATION AND CERTIFICATIONS:**

- B.S., Computer Science, University of Nebraska, 1986 1988
- Six Sigma Certified
- VB.NET Certified
- Cisco/VoIP
- CMMI Level 3 certified
- CloudShield (DPI)
- BIRT Reports

#### **PROFESSIONAL EXPERIENCE:**

SAIC 2009 – Present

#### Project Lead/Architect - IR&D Unmanned Aircraft System Operations

- Currently working on logical design for AFSOC's Cloud-based RPA Operations Center due to go online in 2013; generated products include: OV1-5, SV-1, SV2, SV4, SV5, and SV6.
- Worked on the Next Generation Remote Piloted Vehicle Operations Center through IR&D funding. The project entailed a Detailed Capabilities-based DoDAF Architecture, Requirements creation, a CONOPS, and a Touch screen-based demonstration. The IR&D has had influence on current Air Force and Army RPA doctrine.
- Built on previous IR&D's work by creating a Cloud-based Health and Status network monitoring tool. The tool will provide network status via SNMP traps/polling, provide dynamic configuration, and provide analytic prognostication.
- Updated a Flex/Flash Demo to C# Windows Presentation Foundation (WPF) with Virtual Earth and the incorporation of Network Monitoring Software as well as iPad connectivity.
- Continued to work on a **Mobile Network App** for **IOS/iPad** platform.
- Promoted solid engineering design focused the **DoDAF** architecture products: OV-1, SV-6, SV-8, and Trade Studies. These products will directly funnel into the creation of both a Logical and Physical design specification.
- To story board the architecture, created a **Flex/Flash Touch screen Rich Internet Applications** (**RIA**) demonstration which featured, **Adobe LiveCycle Collaboration Service** (LCCS) and walked through key aspect of the architecture. The demo highlighted the use of advance concepts- dubbed Vision-Think (incorporating Imagery merged with Meta data) to showcase increased speed of Command and Control.
- Marketing the IR&D work, Terry was instrumental in the creation of an RPA video which showcased a UAV Operational Mission as well as highlight SAIC technologies. The video showed SAIC customers and was very well received by the UAV/RPA community.
- Incorporated the use of Virtual Machines in the project, including the creation of Network appliances for export.

Boeing 2008 – 2009

#### Systems Engineer/Architect

- Used Rhapsody/Systems Architect created System Engineering DoDAF artifacts (OVs, SV's) in support of a Health and Status monitoring tool (GOHST) for the BMDS shield.
- Gained knowledge of interfaces systems to include GMD Radar, Missile, and Satellite Assets. Architecture was created through the use of Use Cases, Sequence diagrams, state diagrams, system flows, and trade studies to assist Boeing in a multi-year project.
- Participated in four (4) Technical Exchange meetings (TIMs) and helped author Interface Control Documents (ICDs).

Booz Allen 2008

#### Systems Engineer

- Placed on the Transformation Satellite Communications program's (TSAT) Surge Effort in order to perform detailed software and systems analysis. TSAT was a multi-billion dollar network communications system for tactical and strategic warfighters and the Homeland Defense community that is an integral part of the Defense Information Systems Agency (DISA) Global Information Grid (GIG). The primary purpose of TSAT is to create a network system that connects the GIG to global users that are beyond line of sight of a GIG fiber terminus.
- Used DoDAF derived products, Interface Control Documents (ICDs) and UML diagrams to form a plan of attack and get the program back on track.
- Contributed to the Surge effort providing SME, use case analysis, Thread document, leadership as well as coordination with Test and Systems Engineering teams (Tag Ups, Product meetings, modeling).
- Formed a team using Systems Architect for Systems Design and SOA modeling. In the SOA model, introducing state change and anomalies can demonstrate future performance problems or bottlenecks before construction or integration. This paradigm suits itself well to SOA architecture with discrete entities and time cycles.

Oracle 2007 – 2008

#### **Business Architect**

- Worked on a system which entailed processing of USMTF message traffic, converting them XML, and then displaying coordinate information to an ESRI client via Geospatial coordinate look up. Cross Domain security (High-level to low) was obtained via Oracle's OAS, OID, and LDAP protocols through roles and label security. For the J2EE environment used JBoss and Java Servlets.
- Created business development paper for Air Force Weather (AFWA). The paper outlines a strategy of employing SOA architecture and Oracle best practices to enhance current AFWA system. Real time data feeds and data processing are handled by Oracle's Real Time Database "Times Ten" and the RTTI connection. Queries are accomplished via web services an Oracle's Application server. Data storage is estimate to be in petabytes.

1TT 2005 – 2007

#### Lead Software/Systems Architect - Wide Band Global Systems (WGS)

- Functioned as a Lead Systems Architect and worked on Satellite power control systems for communications on the Wideband Global Systems program (essentially a WAN in the Sky).
   This project included the use of Voice Over IP (VoIP) in support of the Future Warrior Effort.
- Used a Service-Oriented Architecture (SOA) approach, supported Satellite communications in the Ku, Ka, and L and X bands to replace current/legacy Defense Satellite Communications System (DSCS). Project scope included: RF Spectrum analysis and uses Internet Protocol Satellite Modems for message traffic.
- Used Reverse Engineering and wrote new Visual C++ software in creation of NT services. For SOA, used XML, MSM Queues and an Oracle 10g database to round out the components.
- Created functional specifications, system requirements, and detailed design documents.
- Used Enterprise Architect applications for data modeling and UML use cases, state, sequence and class diagrams.
- Participated in PDR's and CDR's for the full project scope.

Raytheon 2003 – 2005

#### Software Architect

- Used MetaMatrix for Enterprise Information Integration (EII) tool modeled and mapped incoming data sources into a standard model in support of Intelligence community.
- Used model-driven architecture; product was used in the creation of a federated query system.
- Used JDBC and WSDL connectors forming connections to disparate data sources and placed them into MetaMatrix Virtual Models and Virtual Databases.
- Created documentation in support of the data sources.
- Utilized Rational Rose, for source Data Modeling and UML sequence diagrams.
- Used SOA architecture with Java and JMS for data integration with Meta Matrix.
- Worked on a three-tier application which used WebSphere application server, JavaBeans, and Java Portlets to a back-end Oracle 9i database. The effort, created for a Government agency, was on time, and on budget.
- Received an award in contributing to Raytheon's CMMI Level 3 compliance effort.
- Developed C++ software for Satellite Mission Management using Rational Rose, UNIX workstations, and PVCS. Large LOC (Line of Code) effort involving satellite data.
- Used Purify Tools as well as XML, X-Windows (Motif); also used Forte Workshop and IDE which allow for software Debugging and creation in C++ and Java.
- Created five GUI screens, as well as utilized a Model View Controller (MVC) paradigm for data presentation and storage. Pro\*C was employed as the back-end mechanism for database storage/retrieval.

Policy Studies, Inc.

#### Consultant

- Worked on a short-term Java application on a Windows platform that generates PDF files form XML and an XSLT transform process. The files are created from XML to an XLS-FO intermediate file, and then sent to a FO transform object to PDF format.
- Used the SAX Parser to perform transforms.
- Used ANT to build the program and Visual Basic for Client GUI for the State of Missouri.

USA.NET 2002

#### Consultant

- Hired on this contract to extract mailbox information from Microsoft Exchange 2000 over a clustered environment of Exchange servers. This information is utilized to bill customers via Exchange mailbox usage.
- Implemented LDAP queries to the Active Directory to pull organizational data. Used Visual C++ as main tools in the effort. Two developers were working this project for six months; hired for a parallel effort, finished the project in one-week, increased processing speed 1000%.

TouchStar Software 2002

#### Lead Consultant

- Designed Call Center software using Dialogic hardware boards. These small call centers were used for both outbound (Predictive Dialing) and inbound.
- Used off-the-shelf components of Windows and VB6, the systems stored data via SQL Server 2000, and used web-pops via IIS and ASP Pages.
- Created custom Reports using Crystal Reports 8.0.

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#### **AT&T Broadband/Comcast**

**2001 – 2002** 

#### Lead Consultant

- Worked a short-term Java development project. The project has a JDBC connection to a Remedy database and utilizes an XML transaction model.
- Used the ATG Dynamo application server to handle Java Servlets, JSP pages, Java Native Interface (JNI) to a back end C API (Remedy), and XML-RPC on a Sun Solaris platform.

Avava 2000 – 2001

#### Data Center Architect

- Created a Voice Activated (SAPI) IE Embedded Toolbar to handle Web-based Screen Pops and incoming call data and web navigation.
- Functioned as a Software Architect for Siebel and Avaya a universal Call Queue for the eight billion (8B) dollar NMCI project (To date, the largest Government contract ever awarded). The queue was able to support five (5) different types of media: E-mail, Fax, and Voice, Voice Mail, and Web submissions. Worked with EDS to create screen pops via a Remedy ARS client.

TeleTech, Inc. 1999 – 2000

#### Data Center Architect

- Hired as the Technical Lead for a state of the art call center application. The applications interfaced to an ActiveX server and back end Call Center Switch (Computer Telephony Integration) to allow customers to have various methods of communication with an agent including: Web Co-browsing, Chat, telephone, and Voice Over IP. All incoming communications were relayed through state of the art Lucent switches to provide customers with one of the most sophisticated call center applications in the world. The system incorporated Genesys ActiveX toolkit running on UNIX servers and switch interface software.
- Created a parallel effort utilizing Interdev, and developed ASP pages on a Web Server as the presentation layer.
- Led a team of approximately eight people on this effort.

# 5. Junior Developer (Part Time) - Rafael Renz

#### **EDUCATION AND CERTIFICATIONS:**

- A.S., Multimedia, Boise Bible College, 1997 2002
- B.S., Advertising and Digital Media Design, Colorado Technical University 2008 Present
  - Static and dynamic/interactive design using Adobe products
  - Web design and software scripting techniques

#### **PROFESSIONAL EXPERIENCE:**

Atmel 2008 – Present

#### Cleanroom Production Operator

- Operation and daily or weekly qualification of the following toolsets:
  - Varian Extrion e220/e500 Series Ion Implanter
  - Varian VIISION Ion Implanter
  - Varian Kestrel MEV High-Energy Ion Implanter
  - Applied Materials A9500 High-Current Ion Implanter
  - Fusion UV Bake
  - Applied Materials Centura CVD (Chemical Vapor Deposition)
  - Applied Materials Endura PVD (Physical Vapor Deposition)
- General maintenance of cleanroom facilities relating to the aforementioned toolsets
- Operating Systems include MS Windows Server 2003, Windows XP, Vista, Windows 7
- Development Tools: Visual Studio 2005, 2008, 2010 (i.e., Team Foundation Server (TFS)
- Programming: PostScript Level 2, XAML, ADO, WPF, VB6, .NET 2.0 4.0 (C# and VB.NET)
- Database Software: SOL Server, Access
- Other Software: MS Office, SourceSafe, Adobe Design Products, Corel Graphics Suites, and others, Team Development products, SVN
- Hardware: PC maintenance, repair, assembly and installation, Network configuration

#### Digital Science West 2005 – Present

#### Software Developer/Programmer

- Maintaining and expanding a professional Point of Sales back office suite for POSitouch POS. New additions are currently being done in .NET 3.5, C#, and WPF.
- Designed and implemented, as part of a development team, a SQL Server-based database and object model for an enterprise store management suite. Developed using Visual Basic .NET 2.0, and 3.0. The suite enables items, item pricing, and sales changes to be pushed to, and pulled from, multiple stores in various regions and chains. Created to meet the market demand of corporations seeking to centralize the management of multi-store information.
- Developed GUI interfaces and wizards for the same management suite. These interfaces incorporate drag-and-drop functionality as well as cost and pricing calculators. Elements within the interfaces are data-bound to the objects in the object model, which in turn are retrieved dynamically from the SQL database.
- Modified several older utilities (based on VB 6 and C# .NET 1.1) to work with multiple languages by means of lookup tables and various character sets, and provided the Spanish translation of the same.
- Set up our internal office network as a domain using Windows Server 2003, and provided regular maintenance.
- Designed, developed, and set up company website (www.digisciwest.com) and web server.
- Set up a mail server (POP and SMTP) on the company domain.

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Providence PC 2005 – 2006

#### PC Support Technician

• Performed in-house and on-site PC maintenance and repair. Client needs ranged from individuals requiring upgrades to corporations requiring major network improvements. Duties encompassed virus scans, software upgrades, hardware conflicts, and networking.

Distributed Trend Micro PC-cillin Internet Security Suite 2005 and provided on-site support.

#### MegaGraphics, S.A. de C.V.

1992 - 1996

#### PC Support Technician/Instructor; Graphic Artist/Designer

- Provided PC assembly and installation. Installed operating systems and applications, offering personal technical support as necessary.
- Functioned as a part-time instructor for a Company-hosted a technical/vocational school.
- Prepared lesson plans and taught courses in the following:
  - Basic computer use (MS-DOS and Windows)
  - Advanced Windows concepts (3.1, 3.11, and 95)
  - Aldus PageMaker
  - Corel graphics suite (versions 3 and 5)
  - Microsoft Word
  - Microsoft Excel
- Graphic arts work involved designing forms and documents for individual clients, corporations, and printing presses. Software knowledge covered the following:
  - Aldus PageMaker (several versions)
  - Corel graphics suites
  - Adobe PhotoShop
- Employed dynamic techniques using the PostScript page description language to create plugin effects for use in Corel.

# 6. CM / Technical Writer / Documentation Specialist (Part Time) - Merlene Reynolds

#### **EDUCATION AND CERTIFICATIONS:**

- M.S., Criminology, 2006 Present (in progress)
- B.A., Liberal Arts, Regis University, Denver, Colorado, 1999 2003

#### **PROFESSIONAL EXPERIENCE:**

#### Merlene's Memos, LLC

**2005 – Present** 

#### **Communications Content Consultant**

- Independent consultant providing web content, documentation developer, and technical writer for U.S. West Knowledge Engineering, U.S. West Advanced Technologies, and Non-Profit organizations such as the Open Door Fellowship, The Same Old Café, and the World Engineering Exchange.
- Published Writer/Author for specialized technical magazines, technical publications, etc., providing full-length feature articles.
- Non-Fiction Author for several print and web-based publications.

COMSYS 2005

#### **Proposal Writer**

- Helped complete a Government proposal for five various military-oriented Government agencies to finalize a response to a Request for Proposal (RFP) from the U.S. Air Force.
- Responsible for project completion including compiling, editing, formatting, and producing a 200-page document working under strict guidelines and short deadlines.

#### World Engineering Exchange, Ltd.

2002 - 2003

#### Senior Technical Writer

- Primarily responsible for creating two distinct online help systems to support the American Society of Testing and Materials' (ASTM) newly developed software products. Each website was designed for and delivered to a separate international audience.
- Performed Web-based quality assurance testing to verify usability, functionality, and data content. Wrote product reviews of test results.

Oracle Corporation 2000 – 2002

#### Project Manager

- Led a five-member team to train and implement a CRM-related, solution-centered knowledgebase software application to help call center technical analysis to provide technical support to customers.
- Participated in system tests and conducted user acceptance testing (UAT) for users in Colorado, California, and Canada
- Trained 250 technical analysts in a classroom environment and developed online Web-based training for follow-up support.

MCI 1994 – 2000

#### Senior Technical Writer

- Responsible for the creation and delivery of multiple documentation deliverables ranging from full software, life-cycle system documentation, to user guides in both online and print format.
- Duties included conducting peer reviews, editing, collaborating with internal users to develop business requirements for the creation of a Web-based, context-sensitive help system for

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several telecommunications 'value-added' applications to help users install, maintain, and operate the 800 calling network.

#### **Rocky Mountain Bank Note**

1981 – 1983

#### Project Leader

- Responsible for system and operations implementation to help establish a centralized customer billing center.
- Conducted research by interviewing Subject Matter Experts representing sales, customer support, manufacturing, and billing operations.
- Implemented new department and associated applications designed to increase production, reduce costs, and improve customer service.
- Conducted one-on-one training for 225 sales representatives and customer support representatives from 19 distinct manufacturing facilities. This system reduces the company's operating costs by more than \$10M.

Micromdex, Inc. 1978 – 1980

#### Supervisor, Computer Operations

- Supervised startup computer operations and system implementation for a newly created data center for this medical micropublishing information company.
- Established computer operations policies and procedures for the Denver Poison Center's DRUGDEX and PoisonDex systems by collaborating with clinical representatives and information technology Subject Matter Experts.

# 7. SQA Engineer (Optional) - Mark Orlicky

#### **EDUCATION AND CERTIFICATIONS:**

- M.S., Systems Management, Minor: Information Systems, University of Southern California (USC), 1981 - 1983
- B.S., Mathematics, Minor: Computer Science, New Mexico State University, 1969 1973
- Certificate Program: Total Quality Management (TQM)
- Certificate Program: Oracle Data Base Administration (DBA), Colorado Technical Institute

#### **PROFESSIONAL EXPERIENCE:**

**SofTec Solutions, Inc.** 

**2011 – Present** 

#### Software Quality Assurance Engineer for the US Air Force Academy

- Provide Software Quality Assurance Testing on a wide variety of software applications. Tests
  requirement implementation, assists with customer acceptance testing, reviews developers'
  unit testing, and oversees peer reviews of developed code.
- Requirements Management Lead, working with customers to define initial requirements, refine the requirements, update the requirements during development, and author the Software Requirements Specification (SRS) and the Requirements Traceability Matrix (RTM).
- Works in a Scrum/Agile software development environment, requiring good teamwork interpersonal skills. Uses the Team Foundation Server (TFS) product suite, including Visual Studio and Test Management System, to manage requirements and document tests.
- Provides leadership skills and knowledge in Metrics Analysis, Lessons Learned, Process Improvement, Risk Management, and Documentation Management.
- Successfully led test projects for three development efforts in first six months, earning plaudits from the Government customer.
- Wrote 9 high quality contract deliverable WEdge documents for team. Recognized by team as skilled author, always able to help them out with their documents.

#### L-3 COMMUNICATIONS

2009 - 2011

#### **Deputy Organization Manager**

- Deputy Organization Manager, backup to Organization Manager for all elements of the Organization.
- Interfaced directly with senior members of the Joint Requirements Development Center (JRDC) management as well as senior members of the Government staff in a consultant role and a technical expert / advisor in DMETS activities.
- Responsible for representing DMETS in future plans to include future BMDS element integration, expansion into theater/regional training, and coordination with exercises and war games.
- Developed IMP/IMS, knowledge of JRDC proposal, contract, and budget practices.
- Responsible for supporting DMETS process improvement activities, implementing Capability Maturity Model Integration (CMMI) compliant processes, and identifying appropriate evidence for external process reviews, audits, and appraisals.
- Lead for DMETS Metrics, CCB, Lessons Learned, and Risk Management activities.

#### **L-3 COMMUNICATIONS**

2002 - 2009

#### Staff Systems Analyst, Process Engineer

- Audited software processes to verify SOW and CMMI compliance.
- Identified and gathered evidence, using the SEI's CMMI as guidance.
- Facilitated TQM Process Improvement working groups.
- Performed Quality Control checks of Oracle forms, Test Plans, and deliverables.

- Performed at company level as a CMMI auditor and audit team member of other projects.
- Lead Risk Management, Lessons Learned, and Metrics programs.
- Process Engineer for successful project to improve to CMM Level Five. Facilitated process improvements, championed changes, worked with team members in total integration effort.
- Wrote numerous procedures to document project roles and responsibilities. Commended during successful procedures review by SEI auditors.
- Metrics Lead for FTO/OTS and for MDSEC. Helped write JRDC Metrics Plan, conforming with prime contractor's overall Metrics Plan; addressed contractual and customer expectations
- Participated in over 10 CMMI appraisals as an audit team member for the company.
   Independently audits QA compliance for L-3.

#### L-3 COMMUNICATIONS

2000 - 2002

#### Staff Systems Analyst, Lead Configuration Management Analyst

Audited and analyzed baseline configurations of several "legacy" software systems. Managed change process, controlled changes, and performed on-site audits of software, hardware, documentation, and configuration management procedures.

- CM Lead during successful project to improve to CMMI Level Three. Facilitated process improvements, championed changes, worked with team members in total integration effort.
- Wrote numerous procedures to document CM roles and responsibilities. Commended during successful procedures review by SEI auditors.

#### L-3 COMMUNICATIONS

1995 - 2000

#### Staff Systems Analyst, Quality Assurance Engineer

Audited software products and processes to verify SOW and CMMI compliance. Performed SQA actions, using the SEI's CMM as guidance. Facilitates TQM Process Improvement working groups. Performed Quality Control checks of Oracle forms, Test Plans, and deliverables. Performed at company level as a CMM auditor of other projects.

- SQA Lead during successful project to improve to CMM Level Two. Facilitated process improvements, championed changes, worked with team members in total integration effort.
- Wrote numerous procedures to document SQA roles and responsibilities. Commended during successful procedures review by SEI auditors.
- Selectively chosen to replace QA manager (one year duration).

#### **Loral Communication Systems**

1995

#### Senior Software Test Engineer

Planned, and executed software regression tests for satellite control software on IBM mainframe computer. Reviewed and rewrote all test procedures to match operational requirements and standards.

- Excellent results from all tests performed as a result of attention to detail.
- Selectively chosen to "QC" written testing correspondence.

#### Northern NEF, Inc

1994 – 1995

#### Senior Software Configuration Management Engineer

Audited and analyzed baseline configurations of several "legacy" software systems. Performed on-site audits of software, hardware, documentation, and configuration management procedures. Accomplishments:

• Excellent results from qualitative analysis audits provided valuable insights; even the draft reports were highly coveted and praised by the customers.

# NATO Chief, Computer Support Branch

1991 – 1993

Directed mainframe computer center operations to provide Command and Control support around the clock. Managed personal computer support for 650 personnel. Computer Policy Director, Computer Security Director, and project manager for two large computer projects. Supervised 22 multinational military and civilian personnel.

# GSA Project Number ID08120040 WEdge Software Maintenance at United States Air Force Academy

As Project manager for a large networking and downsizing / re-engineering project, planned, budgeted, and acquired computers, software, and maintenance support. The project remained on schedule despite budget cutbacks and personnel reductions.

#### **Air Force Operational Test and Evaluation Center**

1985 - 1989

#### Chief, Modeling And Simulation Branch

Managed simulation modeling support for all aspects of the operational testing of major defense systems: test design including identification of critical factors; selection, development, and validation of computer models; and management of contractors. Supervised 7 analysts.

- Organization expert on validation of computer models; selectively chosen as representative for key conferences. Wrote two test plans which were well received by using agencies.
- Organization expert in contracting for modeling and simulation; technical selection authority for 6 large model analysis contracts.

#### Air Force Center for Studies and Analyses Center.

1981 – 1985

#### Chief, Computer Models Team / Modeling Simulation Analyst

Senior computer applications analyst for 15 operations research analysts, providing IBM mainframe computer debugging support; emphasizing IBM utilities. Programmed in Fortran, Jovial, Cobol, and PL/I computer languages on IBM mainframes and Sun Workstations.

• Key analyst for several classified studies which were presented to Congress and the White House. Results were used to select weapon systems and make billion dollar purchases.

### **USAFA Call Order # 04 Pricing**

Item No.	Description	QTY	Unit	Unit Price	Amount
0001	Software Maintenance	12.00	MO	\$ 62,995	\$755,939
0002	Documentation Support	12.00	MO	\$ 5,323	\$ 63,873
0003	Supplementary Capability			NTE	\$390,000
0004	Software Quality Assurance Support	1,880.00	HR	NTE	\$150,611
0005	Travel			NTE	\$ 10,000
0006	Other Direct Costs (ODC) *				\$ 55,329
	* The Cost for Optional CLIN 0004 ODCs (\$8,499) i	s included i	n this	total price	
OPTION					
1001	Software Maintenance	12.00	MO	\$ 62,995	\$755,939
OPTION					
1002	Documentation Support	12.00	MO	\$ 5,323	\$ 63,873
OPTION					
1003	Supplementary Capability			NTE	\$390,000
OPTION	N				
1004	Software Quality Assurance Support	1,880.00	HR	NTE	\$150,611
OPTION					
1005	Travel			NTE	\$ 10,000
OPTION					
1006	Other Direct Costs (ODC)				\$ -
OPTION					
2001	Software Maintenance	12.00	MO	\$ 62,995	\$755,939
OPTION					
2002	Documentation Support	12.00	MO	\$ 5,323	\$ 63,873
OPTION					
2003	Supplementary Capability			NTE	\$390,000
OPTION					
2004	Software Quality Assurance Support	1,880.00	HR	NTE	\$150,611
OPTION					
2005	Travel			NTE	\$ 10,000
OPTION					
2006	Other Direct Costs (ODC)				\$ -
OPTION					
	Software Maintenance	12.00	MO	\$ 62,995	\$755,939
OPTION					
	Documentation Support	12.00	MO	\$ 5,323	\$ 63,873

#### **USAFA Call Order # 04 Pricing**

Item No.	Description	QTY	Unit	Unit Price	Amount
_					
OPTION					
3003	Supplementary Capability			NTE	\$390,000
OPTION					
3004	Software Quality Assurance Support	1,880.00	HR	NTE	\$150,611
OPTION					
3005	Travel			NTE	\$ 10,000
OPTION					
3006	Other Direct Costs (ODC)				\$ -

Our pricing is based on approved 2011 Schedule 70 rates. We are holding these rates at the current level for the base year. For the option years, we will provide updated rates on an annual basis that reflect the GSA approved uplift based on Bureau of Labor Statistics Economic Cost Index data.

#### USAFA Call Order # 04 Pricing for Option Year III (POP 10/01/2014 - 09/30/2015)

CLINS	Name	Team SDNC Position Title	GSA Schedule 70 Labor Category (Original Proposed)	GSA Schedule 70 Labor Category (Updated One)	MDR GSA Sch. Rate	Final Reduced Rate	Disc. %	Hours	Est. Cost
	developersDen, Inc								
0001	Pat Speer	Task Lead Architect	System Architect	System Architect	98.74	95.76	3.02%	1,880	\$ 180,029.00
0001	Chad Mello	Development Lead	Senior Consultant	Software Development Lead	93.25	90.44	3.01%	1,880	\$ 170,027.00
0001	Daniela Trapani	Senior Developer	Senior Application Programmer	Application Programmer III	88.32	85.66	3.01%	1,880	\$ 161,041.00
	SofTec Solutions, Inc								
0001	Terry Torres	Senior Developer	Sr. System Prog/Analyst II	Sr. System Prog/Analyst II	98.08	93.62	4.55%	1,880	\$ 176,006.00
0001	Rafael, Renz	Junior Developer	Systems Engineer I	Systems Engineer I	68.01	45.00	33.83%	1,410	\$ 63,450.00
0001	Martin Payne	BPA Program Manager	Project Manager III	Project Manager III	107.24	103.57	3.42%	52	\$ 5,386.00
									\$ 755,939.00
0002	Merlene Reynolds (P/T)	Doc/Tech Writer	Technical Documentation Spec	Technical Documentation Spec	46.23	45.30	2.02%	1,410	\$ 63,873.00
0004	Mark Orlicky	SQA	Sr. System Prog/Analyst II	Sr. System Prog/Analyst II	98.08	80.11	18.32%	1,880	\$ 150,611.00

Our pricing is based on approved 2011 Schedule 70 rates. We are holding these rates at the current level for the base year. For the option years, we will provide updated rates on an annual basis that reflect the GSA approved uplift based on Bureau of Labor Statistics Economic Cost Index data.

PWS 3.3 Exhibit 1 - Pricing for Supplemental Capabilities Pricing

Contractor Name:	GSA Schedu		GS-35F-0036P				
Performance Period Year: Base Year March 2012 - March 2013							
Labor Category Description	GSA Schedule Ceiling Rate	MDR (Minimum Discount Rate)	Resulted Discounted Labor Rate	Resulted Discounted Overtime Labor Rate			
Project Manager I	\$ 65.25	1.00%	\$ 64.60	\$ 64.60			
Project Manager III	\$ 119.23	10.06%	\$ 107.24	\$ 107.24			
Functional Specialist II	\$ 100.08	8.56%	\$ 91.52	\$ 91.52			
IT Specialist I	\$ 60.39	1.00%	\$ 59.79	\$ 59.79			
IT Specialist II	\$ 62.18	1.00%	\$ 61.56	\$ 61.56			
Database Management Specialist I	\$ 65.73	9.04%	\$ 59.79	\$ 59.79			
Database Administrator I	\$ 109.28	4.52%	\$ 104.34	\$ 104.34			
Database Administrator III	\$ 153.81	5.69%	\$ 145.05	\$ 145.05			
Systems Engineer I	\$ 70.78	3.92%	\$ 68.01	\$ 68.01			
Network Designer/Architect	\$ 126.27	1.00%	\$ 125.01	\$ 125.01			
LAN/WAN Specialist I	\$ 44.01	4.63%	\$ 41.97	\$ 41.97			
LAN/WAN Specialist II	\$ 61.32	7.93%	\$ 56.46	\$ 56.46			
LAN/WAN Specialist III	\$ 62.47	2.35%	\$ 61.00	\$ 61.00			
LAN/WAN Specialist IV	\$ 73.63	4.21%	\$ 70.53	\$ 70.53			
LAN/WAN Specialist VI	\$ 84.62	6.02%	\$ 79.53	\$ 79.53			
Senior Programmer/Analyst I	\$ 97.44	6.58%	\$ 91.03	\$ 91.03			
Junior Programmer/Analyst I	\$ 28.86	1.00%	\$ 28.57	\$ 28.57			
Senior Systems Programmer/Analyst I	\$ 82.27	0.56%	\$ 81.81	\$ 81.81			
Senior Systems Programmer/Analyst II	\$ 99.07	1.00%	\$ 98.08	\$ 98.08			
Quality Assurance Specialist I	\$ 70.28	3.22%	\$ 68.01	\$ 68.01			
Documentation Specialist I	\$ 42.88	1.00%	\$ 42.45	\$ 42.45			
Help Desk Specialist I	\$ 30.68	1.27%	\$ 30.29	\$ 30.29			
Help Desk Specialist II	\$ 34.80	1.00%	\$ 34.45	\$ 34.45			
Help Desk Specialist III	\$ 44.49	7.21%		\$ 41.28			
Help Desk Specialist IV	\$ 48.00	1.00%		\$ 47.52			
Configuration Management Specialist	\$ 48.10	1.00%		\$ 47.62			
Computer Graphics Specialist I	\$ 38.65	1.00%		\$ 38.26			
Technical Documentation Specialist	\$ 46.70	1.00%	\$ 46.23	\$ 46.23			
Network Engineer I	\$ 49.10	1.00%		\$ 48.61			
Network Engineer III	\$ 57.05	1.00%		\$ 56.48			
Network Administrator II	\$ 70.28	4.62%		\$ 67.03			
Senior Financial Analyst	\$ 44.90	1.00%	\$ 44.45	\$ 44.45			
Senior Systems Architect I	\$ 87.82	1.89%		\$ 86.16			
Quality Assurance Manager	\$ 105.88	1.00%		\$ 104.82			
Computer Systems Analyst III	\$ 51.79	1.00%	·	\$ 51.27			
Computer Systems Analyst IV	\$ 57.77	1.00%	\$ 57.19	\$ 57.19			

Computer Systems Analyst VII		72.20	1.00%	\$ 71.48	\$ 71.48
Database Management Analyst		113.80	1.00%	\$ 112.66	\$ 112.66
Oracle Applications Administrator		130.73	1.00%	\$ 129.42	\$ 129.42
Oracle Applications Database Administrator	\$	153.22	1.00%	\$ 151.69	\$ 151.69
Oracle Applications Functional Specialist III	\$	155.25	1.00%	\$ 153.70	\$ 153.70

Contractor Name: developers Den	GSA Schedu	ıle No:	GS-35F-0532X		
Labor Category Description	GSA Schedule Ceiling Rate	MDR (Minimum Discount	Resulted Discounted	Resulted Discounted Overtime	
	Cenning 2 time	Rate)	Labor Rate	Labor Rate	
Applications Programmer I	\$ 57.27	0.00%	\$ 57.27	\$ 57.27	
Applications Programmer II	\$ 74.05	0.00%	\$ 74.05	\$ 74.05	
Applications Programmer III	\$ 88.32	0.00%	\$ 88.32	\$ 88.32	
Software Development Lead	\$ 93.25	0.00%	\$ 93.25	\$ 93.25	
Systems Architect	\$ 98.74	0.00%	\$ 98.74	\$ 98.74	
Network Engineer I	\$ 55.49	0.00%	\$ 55.49	\$ 55.49	
Technical Writer I	\$ 74.05	0.00%	\$ 74.05	\$ 74.05	
Project Manager I	\$ 93.80	0.00%	\$ 93.80	\$ 93.80	
Configuration Management Specialist I	\$ 74.05	0.00%	\$ 74.05	\$ 74.05	
SQA Engineer II	\$ 88.32	0.00%	\$ 88.32	\$ 88.32	

Contractor Name: OSA Schedule No: GS-35F-0543R

Labor Category Description	GSA Schedule Ceiling Rate	MDR (Minimum Discount Rate)	Resulted Discounted Labor Rate	Resulted Discounted Overtime Labor Rate	
Program Manager	\$ 166.36	24.47%	\$ 125.65	\$ 125.65	
Project Manager	\$ 93.58	24.47%	\$ 70.68	\$ 70.68	
Senior Programmer	\$ 124.77	24.47%	\$ 94.24	\$ 94.24	
Programmer Level 2	\$ 103.97	24.47%	\$ 78.53	\$ 78.53	
Programmer Level 1	\$ 70.70	24.47%	\$ 53.40	\$ 53.40	
Senior Software Architect	\$ 174.68	24.47%	\$ 131.94	\$ 131.94	
Software Architect	\$ 140.36	24.47%	\$ 106.01	\$ 106.01	
Senior Network Engineer	\$ 150.76	24.47%	\$ 113.87	\$ 113.87	

Help Desk Support Services Specialist	\$ 68.63	24.47%	\$ 51.84	\$ 51.84
Senior Graphics Designer	\$ 84.22	24.47%	\$ 63.61	\$ 63.61
Quality Assurance Specialist	\$ 71.74	24.47%	\$ 54.19	\$ 54.19
Administrative Specialist	\$ 43.67	24.47%	\$ 32.98	\$ 32.98

Our pricing is based on approved 2011 Schedule 70 rates. We are holding these rates at the current level for the base year. For the option years, we will provide updated rates on an annual basis that reflect the GSA approved uplift based on Bureau of Labor Statistics Economic Cost Index data.

#### Cross Mapping of Old developersDen GSA Labor Categories with New GSA Labor Categories.

Contractor Name: developerDen	GSA Schedule No:	GS-35F-0532X
Applicable SIN	Labor Category Description	Labor Category Description
Applicable SIN	(Old GSA Labor Categories)	(New GSA Labor Categories)
132-51	Application Programmer	Applications Programmer II
132-51	Senior Application Programmer	Applications Programmer III
132-51	Senior Consultant	Software Development Lead
132-51	System Architect	Systems Architect
132-51	Network Engineer	Network Engineer I

No Rate Change: Old and New Rates remain unchanged

**NOTE:** developersDen has updated it's GSA Schedule. Existing labor categories have updated titles and five new categories have been added. Team SDNC is in the process of submitting a request for modification to incorporate developersDen's updated GSA schedule into the BPA. This table maps the old and new labor category names for the existing categories. For the existing categories BPA rates, descriptions, and education and experience requirements are unchanged.